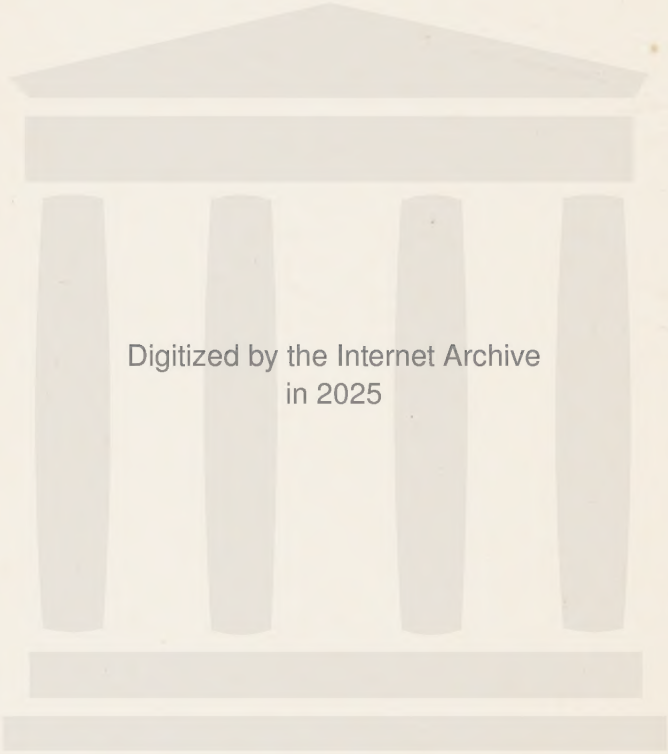
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CAPITAL

A CRITIQUE OF POLITICAL ECONOMY

By KARL MARX

VOLUME III

THE PROCESS OF CAPITALIST PRODUCTION AS A WHOLE

EDITED BY

FREDERICK ENGELS

TRANSLATED FROM THE FIRST GERMAN EDITION BY ERNEST UNTERMANN

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PREFACE.

At last I have the pleasure of making public this third volume of the main work of Marx, the closing part of his economic theories. When I published the second volume, in 1885, I thought that the third would probably offer only technical difficulties, with the exception of a few very important sections. This turned out to be so. But that these exceptional sections, which represent the most valuable parts of the entire work, would give me as much trouble as they did, I could not foresee at that time any more than I anticipated the other obstacles, which retarded the completion of the work to such an extent.

In the first place it was a weakness of my eyes which restricted my time of writing to a minimum for years, and which permits me even now only exceptionally to do any writing by artificial light. There were furthermore other labors which I could not refuse, such as new editions and translations of earlier works of Marx and myself, revisions, prefaces, supplements, which frequently required special study, etc. There was above all the English edition of the first volume of this work, for whose text I am ultimately responsible and which absorbed much of my time. Whoever has followed the colossal growth of international socialist literature during the last ten years, especially the great number of translations of earlier works of Marx and myself, will agree with me in congratulating myself that there is but a limited number of languages in which I am able to assist a translator and which compel me to accede to the request for

a revision. This growth of literature, however, was but an evidence of a corresponding growth of the international working class movement itself. And this imposed new obligations on me. From the very first days of our public activity, a good deal of the work of negotiation between the national movements of socialists and working people in the various countries had fallen on the shoulders of Marx and myself. This work increased to the extent that the movement as a whole gained in strength. Up to the time of his death, Marx had borne the brunt of this burden. But after that the ever swelling amount of work had to be done by myself alone. Meanwhile the direct intercourse between the various national labor parties has become the rule, and fortunately it is becoming more and more so. Nevertheless my assistance is still in demand a good deal more than is agreeable to me in view of my theoretical studies. But if a man has been active in the movement for more than fifty years, as I have, he regards the work connected with it as a duty, which must not be shirked, but immediately fulfilled. In our stirring times, as in the 16th century, mere theorizers on public affairs are found only on the side of the reactionaries, and for this reason these gentlemen are not even theoretical scientists, but simply apologists of reaction.

The fact that I live in London implies that my intercourse with the party is limited in winter to correspondence, while in summer time it largely takes place by personal interviews. This fact, and the necessity of following the course of the movement in a steadily growing number of countries and a still more rapidly increasing number of party organs, compelled me to reserve matters which brooked no interruption for the winter months, preferably the first three months of the year. When a man is past seventy, his brain's fibers of association work with a certain disagreeable slowness. He

does not overcome interruptions of difficult theoretical problems as easily and quickly as formerly. Thus it came about that the work of one winter, if it was not completed, had to be largely done over the following winter. And this took place particularly in the case of the most difficult section, the fifth.

The reader will observe by the following statements that the work of editing the third was essentially different from that of the second volume. Nothing was available for the third volume but a first draft, and it was very incomplete. The beginnings of the various sections were, as a rule, pretty carefully elaborated, or even polished as to style. But the farther one proceeded, the more sketchy and incomplete was the analysis, the more excursions it contained into side issues whose proper place in the argument was left for later decision, the longer and more complex became the sentences, in which the rising thoughts were deposited as they came. In several places, the handwriting and the treatment of the matter clearly revealed the approach and gradual progress of those attacks of ill health, due to overwork, which at first rendered original work more and more difficult for the author and finally compelled him from time to time to stop work altogether. And no wonder. Between 1863 and 1867, Marx had not only completed the first draft of the two last volumes of *Capital* and made the first volume ready for the printer, but had also mastered the enormous work connected with the foundation and expansion of the International Workingmen's Association. The result was the appearance of the first symptoms of that ill health which is to blame for the fact that Marx did not himself put the finishing touches to the second and third volumes.

I began my work on these volumes by first dictating the entire manuscript of the original, which was often hard to decipher even for me, into readable copy. This required con-

siderable time to begin with. It was only then that the real work of editing could proceed. I have limited this to the necessary minimum. Wherever it was sufficiently clear, I preserved the character of the first draft as much as possible. I did not even eliminate repetitions of the same thoughts, when they viewed the subject from another standpoint, as was Marx's custom, or at least expressed the same thought in different words. In cases where my alterations or additions are not confined to editing, or where I used the material gathered by Marx for independent conclusions of my own, which, of course, are made as closely as possible in the spirit of Marx, I have enclosed the entire passage in brackets and affixed my initials. My footnotes may not be inclosed in brackets here and there, but wherever my initials are found, I am responsible for the entire note.

It is natural for a first draft, that there should be many passages in the manuscript which indicate points to be elaborated later on, without being followed out in all cases. I have left them, nevertheless, as they are, because they reveal the intentions of the author relative to future elaboration.

Now as to details.

For the first part, the main manuscript was serviceable only with considerable restrictions. The entire mathematical calculation of the relation between the rate of surplus-value and the rate of profit (making up the contents of our chapter III) is introduced in the very beginning, while the subject treated in our chapter I is considered later and incidentally. Two attempts of Marx at rewriting were useful in this case, each of them comprizing eight pages in folio. But even these were not consecutively worked out. They furnished the substance of what is now chapter I. Chapter II is taken from the main manuscript. There were quite a number of incomplete mathematical elaborations of chapter

III, and in addition thereto an entire and almost complete manuscript, written in the seventies and dealing with the relation of the rate of surplus-value to the rate of profit, in the form of equations. My friend Samuel Moore, who had done the greater portion of the translation of the first volume, undertook to edit this manuscript for me, a work for which he was certainly better fitted than I, since he graduated from Cambridge in mathematics. By the help of his summary, and with an occasional use of the main manuscript, I completed chapter III. Nothing was available for chapter IV but the title. But as the point of issue, the effect of the turn-over on the rate of profit, is of vital importance, I have elaborated it myself. For this reason the whole chapter has been placed between brackets. It was found in the course of this work, that the formula of chapter III for the rate of profit required some modification, in order to be generally applicable. Beginning with chapter V, the main manuscript is the sole basis for the remainder of Part I, although many transpositions and supplements were needed for it.

For the following three parts I could follow the original manuscript throughout, aside from editing the style. A few passages, referring mostly to the influence of the turn-over, had to be brought into agreement with my elaboration of chapter IV; these passages are likewise placed in brackets and marked with my initials.

The main difficulty was presented by Part V, which treated of the most complicated subject in the entire volume. And it was just at this point that Marx had been overtaken by one of those above-mentioned serious attacks of illness. Here, then, we had no finished draft, nor even an outline which might have been perfected, but only a first attempt at an elaboration, which more than once ended in a disarranged mass of notes, comments and extracts. I tried at first to com-

plete this part, as I had the first one, by filling out vacant spaces and fully elaborating passages that were only indicated, so that it would contain at least approximately everything which the author had intended. I tried this at least three times, but failed every time, and the time lost thereby explains most of the retardation. At last I recognized that I should not accomplish my object in this way. I should have had to go through the entire voluminous literature of this field, and the final result would have been something which would not have been Marx's book. I had no other choice than to cut the matter short, to confine myself to as orderly an arrangement as possible, and to add only the most indispensable supplements. And so I succeeded in completing the principal labors for this part in the spring of 1893.

As for the single chapters, chapters XXI to XXIV were, in the main, elaborated by Marx. Chapters XXV and XXVI required a sifting of the references and an interpolation of material found in other places. Chapters XXVII and XXIX could be taken almost completely from the original manuscript, but chapter XXVIII had to be arranged differently in several places. The real difficulty began with chapter XXX. From now on the task before me was not only the arrangement of the references, but also a connecting of the line of reasoning, which was interrupted every moment by intervening clauses, deviations from the main point, etc., and taken up incidentally in quite another place. Thus chapter XXX came into existence by means of transpositions and eliminations utilized in other places. Chapter XXXI, again, was worked out more connectedly. But then followed a long section in the manuscript, entitled "The Confusion," consisting of nothing but extracts from the reports of Parliament on the crises of 1848 and 1857, in which the statements of twenty-three business men, and writers on economics, espe-

cially relative to money and capital, gold exports, over-speculation, etc., are collected and accompanied here and there with short and playful comments. In this collection, all the current views of that time concerning the relation of money to capital are practically represented, either by answers or questions, and Marx intended to analyze critically and satirically the confusion revealed by the ideas as to what was money, and what capital, on the money-market. I convinced myself after many experiments that this chapter could not be composed. I have used its material, particularly that criticized by Marx, wherever I found a connection for it.

Next follows in tolerable order the material which I have placed in chapter XXXII. But this is immediately followed by a new batch of extracts from reports of Parliament on every conceivable subject germane to this part, intermingled with comments of the author. Toward the end these comments are mainly directed toward the movement of money metals and the quotations of bills of exchange, and they close with miscellaneous remarks. On the other hand, chapter XXXV, entitled "Precapitalist Conditions," was fully elaborated.

Of all this material, beginning with the "Confusion," and using as much of it as had not been previously placed otherwise, I made up chapters XXXIII to XXXV. Of course this could not be done without considerable interpolations on my part in order to complete the connections. Unless these interpolations are of a merely formal nature, they are expressly marked as belonging to me. In this way I have succeeded in placing all the relevant statements of the author in the text of this work. Nothing has been left out but a small portion of the extracts, which either repeated statements already made previously, or touched on points which the original manuscript did not treat in detail.

The part dealing with ground-rent was much more fully elaborated, although not properly arranged. This is apparent from the fact that Marx found it necessary to recapitulate the plan of the entire part in chapter XLIII, which was the last portion of the section on rent in the manuscript. This was so much more welcome to the editor, as the manuscript began with chapter XXXVII, which was followed by chapters XLV to XLVII, whereupon chapters XXXVIII to XLIV came next in order. The greatest amount of labor was involved in getting up the tables for the differential rent, II and in the discovery that the third case of this class of rent, which belonged in chapter XLIII, had not been analyzed there.

Marx had made entirely new and special studies for this part on ground rent, in the seventies. He had studied for years the originals of the statistical reports and other publications on real estate, which had become inevitable after the "reform" of 1861 in Russia. He had made extracts from these originals, which had been placed at his disposal to the fullest extent by his Russian friends, and he had intended to use these notes for a new elaboration of this part. Owing to the variety of forms represented by the real estate and the exploitation of the agricultural producers of Russia, this country was to play the same role in the part on ground rent that England did in volume I in the case of industrial wage-labor. Unfortunately he was prevented from carrying out this plan.

The seventh part, finally, was fully written out, but only as a first draft, whose endlessly involved periods had to be dissected, before they could be presented to the printer. Of the last chapter, only the beginning existed. In it the three great classes of developed capitalist society, land owners, capitalists and wage laborers, corresponding to the three great forms of

revenue, and the class-struggle necessarily arising with their existence, were to be presented as the actual outcome of the capitalist period. It was a habit of Marx to reserve such concluding summaries for the final revision, so that the latest historical developments furnished him with never failing regularity with the proofs of the correctness of his theoretical analyses.

The quotations and extracts corroborating his statements are considerably less numerous than in the first volume, as they already were in the second. Wherever the manuscript referred to statements of earlier economists, only the name was given as a rule, and the quotations were to be added later. Of course, I had to leave this as it was. Of reports of parliament only four have been used, but these were abundantly exploited. They are the following:

1) Reports from Committees (of the Lower House), Volume VIII, Commercial Distress, Volume II, Part I, 1847–48. Minutes of Evidence. Quoted as "Commercial Distress, 1847–48."

2) Secret Committee of the House of Lords on Commercial Distress, 1847. Report printed 1848. Evidence printed 1857 (because it was considered too hazardous in 1848).— Quoted as "Commercial Distress, 1848–57."

3) & 4) Report, Bank Acts, 1857.— The same, 1858.— Reports of the Committee of the Lower House on the Effect of the Bank Acts of 1844 and 1845. With evidence.— Quoted as "Bank Acts," or "Bank Committee," 1857 or 1858.

I hope to start on the fourth volume, the history of theories of surplus-value, as soon as conditions will permit me.

In the preface to the second volume of *Capital* I had to square accounts with those gentlemen, who were making much

ado over the alleged fact that they had discovered in the person of Rodbertus the "Secret source and a superior predecessor to Marx." I offered them an opportunity to show what the economics of Rodbertus could accomplish. I asked them to demonstrate the way "in which an equal average rate of profit can and must come about, not only without a violation of the law of value, but by means of it." These same gentlemen, who were then celebrating the brave Rodbertus as an economist star of the first magnitude, either for subjective or objective reasons which were as a rule anything but scientific, have without exception failed to answer the problem. However, other people have thought it worth their while to occupy themselves with this problem.

In his critique of the second volume (*Conrad's Jahrbücher*, XI, 1885, pages 452–65), Professor Lexis takes up this question, although he does not pretend to give a direct solution of it. He says: "The solution of that contradiction" (namely the contradiction between the law of value of Ricardo-Marx and an equal average rate of profit) "is impossible, if the various classes of commodities are considered individually, if their value is to be equal to their exchange-value, and this again equal or proportional to their price." According to him this solution is possible only, if "the determination of value for the individual commodities according to labor is relinquished, the production of commodities viewed as a whole, and their distribution among the aggregate classes of capitalists and laborers regarded from the same point of view. . . . The laboring class receives but a certain portion of the total product, . . . the other portion falls to the share of the capitalists and represents the surplus-product, as understood by Marx, and accordingly . . . the surplus-value. The members of the capitalist class divide this entire surplus-value among themselves, not in proportion to the

number of laborers employed by them, but in proportion to the amount of capital invested by each one. The land is thereby regarded as belonging in the class of capital-value." The Marxian ideal values determined by the units of labor incorporated in the commodities do not correspond to the prices, but may be "regarded as points of departure of a movement, which leads to the actual prices. These are conditioned on the fact that capitals of equal magnitude demand equal profits." In consequence some capitalists will secure higher prices for their commodities than the ideal values, and others will secure less. "But since the losses or gains of surplus-value mutually balance one another in the capitalist class, the total amount of the surplus-value is the same as though all prices were proportional to the ideal values."

It is evident that the problem has not been solved by any means through these statements, but it has been at least correctly formulated, although in a somewhat loose and shallow manner. And this is, indeed, more than we had a right to expect from a man who prides himself somewhat on being a "vulgar economist." It is even surprising when compared with the handiwork of some other vulgar economists, which we shall discuss later. The vulgar economy of Lexis is of a rather peculiar nature. He says that the gains of the capitalist *may* be derived in the way indicated by Marx, but there are no reasons that would *compel* us to accept this view. On the contrary, vulgar economy is said to have a simpler explanation, namely the following: "The capitalist sellers, such as the producer of raw materials, the manufacturer, the wholesale dealer, the retail dealer, all make a profit on their transactions, each selling his product at a higher price than the purchase price, each adding a certain percentage to the price paid by him. The laborer alone is unable to raise the price of his commodity, he is compelled, by his oppressed condition,

to sell his labor to the capitalist at a price corresponding to its cost of production, that is to say, for the means of his subsistence. . . . Therefore the capitalist additions to the prices strike the laborer with full force and result in the transfer of a part of the value of the total product to the capitalist class."

Now it does not require much thought to show that this explanation of vulgar economy for the profits of capital amounts to the same thing as the Marxian theory of surplus-value. For Lexis thus admits that the laborers are in just that forced condition of oppression which Marx has described; that they are just as much exploited here as they are according to Marx, because every idler can sell commodities above their value, while the laborer alone cannot do so; and that it is just as easy to build up a plausible vulgar socialism on this theory, as it was to build up another kind of socialism in England on the foundation of Jevons' and Menger's theory of use-value and marginal profit. I strongly suspect that Mr. George Bernard Shaw, were he familiar with this theory of profit, would eagerly extend both hands for it, discard Jevons and Karl Menger, and build on this rock the Fabian church of the future.

In reality, this theory is merely a transcript of the Marxian. What is the fund out of which all these additions to the prices are paid? The "total product" of the working class. And it is due to the fact that the commodity "labor," or, as Marx has it, "labor-power," must be sold below its price. For if it is a common quality of all commodities to be sold at a price above their cost of production, with the sole exception of labor, then labor is sold below the price which is the rule in this world of vulgar economy. The extra profit thus accruing to the capitalist, or to the capitalist class, then arises in the last analysis from the fact that the laborer, after he has made

up for the price of his labor-power by reproducing it, must produce a surplus-product for which he is not paid, in other words, he produces surplus-value representing unpaid labor. Lexis is very careful in the choice of his terms. He does not say anywhere outright that this is his own conception. But if it is, then it is evident that he is not one of those vulgar economists, every one of whom is, as he says himself, "a hopeless idiot in the eyes of Marx," but that he is a Marxian disguised as a vulgar economist. Whether this disguise is consciously or unconsciously adopted, is a psychological question which does not interest us at this point. The man who can find this out may also be able to discover how it is that some time ago a man of Lexis' intellectual endowments could defend such nonsense as bimetallism.

The first one who really attempted to answer this question was Dr. Konrad Schmidt in his pamphlet entitled, *The Average Rate of Profit, Based on Marx's Theory of Value,* Stuttgart, Dietz, 1889. Schmidt seeks to reconcile the details of the formation of commodity prices with the theory of value and with an average rate of profit. The industrial capitalist receives in his product, first, an equivalent for the capital advanced by him, and second, a surplus-product for which he has not paid anything. But in order to earn his surplus-product, he must advance capital for its production. He must employ a certain quantity of materialized labor for the purpose of appropriating this surplus-product. For the capitalist, the capital advanced by him represents the quantity of materialized labor which is socially necessary for the production of his surplus-product. This applies to every industrial capitalist. Now, since commodities, according to the theory of value, are exchanged for one another in proportion to the social labor required for their production, and since the labor necessary for the manufacture

of the capitalist's surplus-product is accumulated in the capital of the capitalist, it follows that surplus-products are exchanged in proportion to the capitals required for their production, and not in proportion to the labor actually incorporated in them. Hence the share of each unit of capital is equal to the sum of all produced surplus-values divided by the sum of the capitals employed in production. Accordingly, equal capitals yield equal profits in equal times, and this is accomplished by adding the cost price of the surplus-product figured on the basis of the average profit to the cost price of the paid product and selling both the paid and unpaid product at this increased price. Thus the average rate of profit arises in spite of the fact that, according to Schmidt, the average prices of commodities are determined by the law of value.

This is a very ingenious construction. It is made entirely after the Hegelian model, but it has this in common with the majority of the Hegelian constructions that it is not correct. It makes no difference whether the surplus-product or the paid product is considered. If the theory of value is to be applied directly to the average profit both of these products must be sold in proportion to the socially necessary labor incorporated in them. The theory of value is aimed at the very outset against the idea, derived from the capitalist mode of thought, that the accumulated labor of the past, which is embodied in capital, could be anything else but a certain quantity of finished values, namely also a creator of values greater than itself, seeing that it is an element in production and in the formation of profit. The theory of value demonstrates that living labor alone has this faculty of creating surplus-values. It is well known that the capitalists expect to reap profits in proportion to the magnitude of their capitals, looking upon their advances of capital as a sort of cost price of their profits. But if

Schmidt utilizes this conception for the purpose of harmonizing by means of it the prices calculated according to the average rate of profit and those based on the theory of value, he thereby repudiates this theory of value, for he embodies in it as one of its factors a conception which is wholly at variance with it.

Either accumulated labor creates values the same as living labor, and in that case the law of value does not apply.

Or, it is not a creator of values, and in that case Schmidt's demonstration is irreconcilable with the law of value.

Schmidt was misled into straying into this bypath when being quite close to the solution, because he believed that he would have to find as mathematical a formula as possible, by which the agreement of the average price of every individual commodity with the law of value could be demonstrated. But while he has followed a wrong path in this instance, close to the real goal, he shows by the rest of his booklet that he has very understandingly drawn other conclusions from the first two volumes of *Capital.* His is the honor of having found by independent effort the correct answer given by Marx in the third part of the third volume of his work for the hitherto inexplicable sinking tendency of the rate of profit; and of having furthermore correctly shown the genesis of commercial profit out of industrial surplus-value, and of having made a series of statements concerning interest and ground rent, by which he has anticipated things developed by Marx in the fourth and fifth part of the third volume of his work.

In a subsequent article *(Neue Zeit,* 1892–93, Nos. 4 and 5), Schmidt tries another way to solve the problem. It amounts to the statement that competition brings about an average rate of profit by causing the emigration of capital from lines of production with profit below the average to

lines with profit above the average. There is nothing new in the statement that competition is the great equalizer of profits. But Schmidt tries to prove that this leveling of profits is identical with a reduction of the selling price of commodities produced in excess to a measure in keeping with a price which society can pay for it according to the law of value. The analyses of Marx in this work show sufficiently why this way could not lead to any solution.

After Schmidt, it was P. Fireman who attempted a solution of the problem (*Conrad's Jahrbücher,* dritte Folge, III, page 793). I shall not discuss his remarks on some of the other aspects of the Marxian analyses. He starts out from the mistaken assumption that Marx wishes to define where he is only analyzing, or that one may look in Marx's work at all for fixed and universally applicable definitions. It is a matter of course that when things and their mutual interrelations are conceived, not as fixed, but as changing, that their mental images, the ideas concerning them, are likewise subject to change and transformation; that they cannot be sealed up in rigid definitions, but must be developed in the historical or logical process of their formation. From this it will be understood why Marx starts out in the beginning of his first volume, where he makes the simple production of commodities his historical premise and then proceeds from this basis to capital, from a simple commodity instead of its ideologically and historically secondary form, a capitalistically modified commodity. Fireman cannot understand that at all. I prefer to pass over these and other side-issues and proceed at once to the gist of the matter. While the author is taught by the theory that surplus-value is proportional to the labor-powers employed, provided a certain rate of surplus-value is given, he learns from experience that profit is proportional to the magnitude of the total capital employed, provided a

certain average rate of profit is given. Fireman explains this by saying that profit is merely a conventional phenomenon (which means, in his language, that it belongs to a definite social formation with which it stands and falls). Its existence is simply dependent on capital. If this is strong enough to secure a profit for itself, it is also compelled by competition to bring about the same rate of profit for all capitals. In other words, capitalist production is impracticable without an equal rate of profit. Assuming this to be the mode of production, the quantity of profit for the individual capitalist can depend only on the magnitude of his capital, if the rate of profit is given. On the other hand, profit consists of surplus-value, of unpaid labor. And how is the transformation of surplus-value, determined in quantity by the degree of labor exploitation, into profit, determined in quantity by the magnitude of the employed capital, accomplished? "Simply by selling commodities above their value in all lines of production in which the ratio between . . . constant and variable capital is greatest, and this implies on the other hand that the commodities are sold below their value in all lines of production in which the ratio between constant and variable capital is smallest, so that commodities are sold at their true value only in lines of production in which the ratio of c:v represents a definite medium magnitude. . . . Is this discrepancy between the prices and values of commodities a refutation of the principle of value? By no means. For since the prices of some commodities rise above value to the same extent that the prices of others fall below it, the total sum of prices remains equal to the total sum of values . . . the incongruity disappears in the last instance." This incongruity is a "disturbance"; and "in the exact sciences it is not the custom to regard a calculable disturbance as a refutation of a certain law."

On comparing the relevant passages of chapter IX with these statements, it will be seen that Fireman has indeed placed his finger on the salient point. But the undeservedly cool reception given to his able article proves that Fireman still needed many interconnecting links, even after this discovery of his, before he would have been enabled to work out a full and comprehensible solution. Although many were interested in this problem, they were all afraid of burning their fingers with it. And this is due not only to the incomplete form in which Fireman left his discovery, but also to the undeniable faultiness of his conception of the Marxian analyses and his critique of them based on his misconception.

Whenever there is an opportunity to make himself ridiculous by attempting a difficult feat, professor Julius Wolf of Zürich never fails to exhibit himself. He tells us (*Conrad's Jahrbücher,* neue Folge, II, pages 352 and following) that the entire problem is solved by the relative surplus-value. The production of relative surplus-value rests on the increase of the constant capital as compared to the variable capital. "A plus in constant capital has for its premise a plus in the productive power of the laborers. Since this plus in productive power (by way of cheapening the necessities of life) produces a plus in surplus-value, the direct relation between an increase of surplus-value and an increasing share of the constant capital in the total capital is revealed. A plus in constant capital indicates a plus in the productive power of labor. Therefore, if the variable capital remains the same and the constant capital increases, surplus-value must also increase, and we are in agreement with Marx. This was the problem which we were to solve."

Now Marx says the direct opposite in a hundred passages of the first volume. Furthermore, the assertion that, according to Marx, relative surplus-value increases in proportion

as the constant capital is augmented while the variable capital decreases, is so astounding that it defies all parliamentarian language. And finally Mr. Julius Wolf demonstrates in every line that he has neither relatively nor absolutely the least understanding of relative or absolute surplus-value. Truly he says that "at first glance one seems to be in a nest of incongruities," which, by the way, is the only true statement in his whole article. But what does that matter? Mr. Julius Wolf is so proud of his brilliant discovery that he cannot refrain from bestowing posthumous praise on Marx for it and advertising his own fathomless nonsense as a "renewed proof of the acuteness and farsightedness with which Marx has drawn up his critical system of capitalist economy."

But that is not the worst. Mr. Wolf says: "Ricardo likewise claimed that an equal investment of capital yielded equal surplus-values (profit), and that the same expenditure of labor created the same amount of surplus-value. And the question was: How does the one agree with the other? But Marx did not acknowledge this form of the problem. *He has doubtless shown (in the third volume)*, that the second statement is not necessarily a consequence of the law of value, or that it even contradicts his law of value and must, therefore, . . . be directly repudiated." And thereupon Wolf seeks to find out whether Marx or I made a mistake. Of course, it does not occur to him that he is the one who is wandering in darkness.

It would be an insult to my readers, and a total disregard for the humor of the situation, were I to lose one word about this gem of a passage. I merely wish to add this: With the same boldness, which enabled him to foretell even then what Marx "has doubtless shown" in the third volume, he avails himself of this opportunity to report an alleged gossip among the professors to the effect that Konrad Schmidt's above-

named work was "directly inspired by Engels." Mr. Julius Wolf! In the world in which you live it may be customary for a man to challenge others publicly for the solution of some problem and to acquaint his private friends clandestinely with this solution. That you are capable of such a thing is not hard to believe. But that a man need not stoop to such mean tricks in the world in which I live, is shown by the present preface.

Marx had hardly died, when Mr. Achille Loria hastily published an article about him in the *Nuova Antologia* (April, 1883). He starts out with a biography of Marx full of misinformation, and follows it up with a critique of Marx's public, political and literary activity. He misrepresents the materialist conception of history of Marx and twists it with an assurance which indicates a great purpose. And this purpose was later accomplished. In 1886, the same Mr. Loria published a book entitled *La teoria economica della costituzione politica* (The Economic Foundations of Society), in which he announced to his admiring contemporaries that the materialist conception of history, so completely and purposely misrepresented by him in 1883, was his own discovery. True, the Marxian theory is reduced to a rather Philistine level in this book. And the historical illustrations and proofs abound in mistakes which would not be pardoned in a high school boy. But what does that matter? He thinks he has established his claim that the discovery that always and everywhere the political conditions and events are explained by corresponding economic conditions was not made by Marx in 1845, but by Mr. Loria in 1886. At least this is what he has tried to make his countrymen believe, and also some Frenchmen, for his book has been translated into French. And now he can pose in Italy as the author of a new and epoch-making

theory of history, until the Italian socialists will find time to strip the *illustre Loria* of his stolen peacock feathers.

But this is only an insignificant sample of Mr. Loria's style of doing things. He assures us that all of Marx's theories rest on conscious sophistry *(un consaputo sofisma)*; that Marx was not above using false logic, even though he knew it to be so *(sapendolitali)*, etc. And after thus biasing his readers by a whole series of such contemptible insinuations, in order that they may regard Marx as just such an unprincipled upstart as Loria, accomplishing his effects by the same shameless and foul means as this professor from Padua, he has a very important secret for the readers, and incidentally he touches upon the rate of profit.

Mr. Loria says: According to Marx, the amount of surplus-value (which Mr. Loria here mistakes for profit) produced in an industrial establishment under capitalism depends on the variable capital employed in it, since the constant capital does not yield any profit. But this is contrary to fact. For in practice the profit is not measured by the variable, but by the total capital. And Marx himself recognizes this (Vol. I, chapter XI) and admits that the facts seem to contradict his theory. But how does he get over this contradiction? He refers his readers to a subsequent volume which has not yet been published. Loria had previously told his readers with reference to this unpublished volume, that he did not believe that Marx had ever thought for a moment of writing it. And now he exclaims triumphantly: "Not without good reason did I contend that this second volume, which Marx always flings into the teeth of his adversaries without ever publishing it, might very well be a shrewd expedient, to which Marx always resorted whenever scientific arguments failed him *(un ingegnoso spediente ideato dal*

Marx a sostituzione degli argomenti scientifici). And whoever is not convinced after this that Marx stood on the same level of scientific swindle with the *illustre Loria,* is past all redemption.

We have at least learned this much: According to Mr. Loria, the Marxian theory of surplus-value is absolutely irreconcilable with the fact of a general and equal rate of profit. But at last the second volume of *Capital* appeared. It contained my public challenge referring to this point. If Mr. Loria had been one of us diffident Germans, he would have felt a certain embarrassment. But he is a bold southerner, he comes from a hot climate and can claim that a cool nerve is a natural requirement for him. The question concerning the rate of profit has been publicly put. Mr. Loria has publicly declared that it is insoluble. And for this very reason he is now going to outshine himself by publicly solving it.

This miracle is accomplished in *Conrad's Jahrbücher,* N. F., vol. XX, pages 272 and following, in an article dealing with Konrad Schmidt's above-cited pamphlet. After Loria has learned from Schmidt how the commercial profit is made, he sees everything clearly. "Since a determination of value by means of labor time gives an advantage to those capitalists who invest a greater portion of their capital in wages, the unproductive" (he means commercial) "capital can extort from these privileged capitalists a higher interest" (he means profit) "and thus bring about an equalization between the individual industrial capitalists. . . . For instance, if each of the industrial capitalists A, B, C, use 100 working days and 0, 100, and 200 constant capital respectively in production, and if the wages for 100 working days amount to 50 working days, then every capitalist receives a surplus-value of 50 working days, and the rate of profit is 100%

for the first 33.3% for the second, and 20% for the third capitalist. But if a fourth capitalist D accumulates an unproductive capital of 300, which extorts an interest" (profit) "equal in value to 40 working days from A, and an interest of 20 working days from B, then the rate of profit of the capitalists A and B will sink to 20% the same as that of C, and D with his capital of 300 will receive a profit of 60, or a rate of profit of 20%, the same as the other capitalists."

With such astonishing dexterity *l'illustre Loria* solves sleight of hand fashion the same question which he had declared insoluble ten years previously. Unfortunately he did not betray to us the secret of the way in which the owners of the "unproductive capital" obtain the power to extort from those industrials their extra-profit exceeding the average rate of profit and to keep it in their own pockets in the same way in which the land owner pockets the surplus-profit of the capitalist farmer as ground rent. For according to this the commercial capitalists would be levying upon the industrials a tribute analogous to ground rent and thereby bring about an equalization of the rate of profit. Now, the commercial capital is indeed a very essential factor in the equalization of the rate of profit, as nearly everybody knows. But only a literary adventurer, who in the bottom of his heart cares naught for political economy, can venture the assertion that commercial capital has the magic power to absorb all profits above the average rate of profit, even before this average rate has become established, and to convert it into ground-rent for itself without even requiring any real estate for this purpose. Nor is the assertion less astonishing that commercial capital has the gift of discovering those industrials, whose surplus-value just covers the average rate of profit, and that it considers it an honor to mitigate the

fate of those luckless victims of the Marxian law of value by selling its products to them free of charge, without asking as much as a commission for it. What a mountebank a man must be in order to imagine that Marx had to have recourse to such miserable tricks!

But Mr. Loria does not shine in his full glory, until we compare him with his northern competitors, for instance with Mr. Julius Wolf, who was not born yesterday, either. What a small coyote Mr. Wolf seems to be, even in his big volume on *Socialism and the Capitalist Order of Society*, compared to that Italian! How clumsily, I am almost tempted to say modestly, does he stand forth beside the noble cheek of the *maestro* who pretends as a matter of course that Marx is just such a sophist, poor logician, liar and mountebank as Mr. Loria himself, that Marx bamboozles the public with a promise of completing his theory in some future volume which he neither will nor can write, as he very well knows, whenever he gets into a tight place! Unlimited nerve coupled to the smoothness of an eel when slipping through impossible situations, a heroic imperviousness to kicks received by him, a hasty appropriation of the accomplishments of others, an importunate charlatanry of advertising, an organization of fame by the help of a clique of friends — who can equal him in all these?

Italy is the land of classic lore. Since the great time when the morning glow of the modern world rose over it, it produced magnificent characters of unequalled classic perfection, from Dante to Garibaldi. But the time of its degradation under the rule of strangers also bequeathed classic character-masks to it, among them two especially sharply chiseled types, that of Sganarelli and Dulcamara. The classic unity of both is embodied in our *illustre Loria.*

In conclusion I must take my readers across the Atlantic.

Dr. (med.) George C. Stiebeling, of New York, also found a solution of the problem, and a very simple one at that. It was so simple that no one on either side of the ocean cared to take him seriously. This aroused his ire, and he complained about this outrage in an endless number of pamphlets and newspaper articles, on both sides of the great water. He was told in the *Neue Zeit* that his solution was based entirely on an error in his calculation. But this did not disturb him in the least. Marx had also made many errors of calculation, and yet he was right. Let us, then, take a closer look at Dr. Stiebeling's solution.

"Take two factories working with equal capitals for an equal length of time, but with different proportions of their constant and variable capitals. The total capital $(c + v)$ will be regarded as equal to y, and the difference in the proportion of the constant to the variable capital equal to x. In the first factory, y is equal to $c + v$, in the second y is equal to $(c - x) + (v + x)$. The rate of surplus-value is therefore in the first factory equal to $\frac{m}{V}$, and in the second factory equal to $\frac{m}{V+X}$. I designate as profit (p) the total surplus-value (m), by which the total capital y, or $c + v$, is augmented in the given time, in other words, p is equal to m. Hence the rate of profit in the first factory is equal to $\frac{p}{y}$, or $\frac{m}{c+v}$, and in the second factory likewise equal to $\frac{p}{y}$, or $\frac{m}{(c-x)-(v+x)}$, that is to say, it is also equal to $\frac{m}{c+v}$. The . . . problem solves itself in such a way that, on the basis of the law of value, equal capitals employing unequal quantities of living labor in equal lengths of time, a change in the rate of surplus-value brings about the equalization of an average rate of profit." (G. C. Stiebeling, The Law of Value and the Rate of Profit, New York, John Heinrich.)

In spite of the beautiful clearness of the above calculation, we cannot refrain from asking Dr. Stiebeling this question: How does he know that the sum of surplus-values produced by the first factory is exactly equal to the sum of surplus-values produced in the second factory? He states explicitly that c, v, y and x, that is to say, all the other factors in the calculation, are equal in both factories, but not a word about m. It follows by no means that these two quantities of surplus-value are equal simply because he designates them both by m. On the contrary, this is precisely what must be proved, especially since Dr. Stiebeling also identifies the profit p without further ceremony with the surplus-value m. Now, only two possibilities present themselves. Either the m's are equal, both factories produce equal quantities of surplus-value, and therefore, since both capitals are equal, also equal quantities of profit. If so, then Dr. Stiebeling has taken for granted at the outset what he was called upon to prove. Or, one factory produces more surplus-value than the other, and in that case his entire calculation falls to the ground.

Mr. Stiebeling spared neither pains nor money in building upon this erroneous calculation of his mountains of other calculations and exhibiting them to the public. I can assure him, for his own peace of mind, that nearly all of his calculations are equally wrong, and whenever they are not, they prove something entirely different from what he set out to prove. He proves, for instance, by a comparison of the U. S. census figures for 1870 and 1880 that the rate of profit has actually fallen, but explains this fact wrongly, assuming that he has to correct Marx for working his theory with a never changing, stable, rate of profit. But the third part of the third volume of *Capital* shows that this "stable rate of profit" in Marxian economics is purely a figment of Dr.

Stiebeling's brain, and that the falling rate of profit is due to causes which are just the reverse of those indicated by Dr. Stiebeling. No doubt Dr. Stiebeling has the best intentions, but a man who undertakes to discuss scientific questions should learn above all to read the works of the author, whom he wishes to study, just as they have been written, and especially not to find anything in them which they do not contain.

The outcome of the entire investigation, also in this question, shows once more that the Marxian school is the only one which has accomplished something in this line. When Fireman and Konrad Schmidt read this third volume, they will have good reasons for being well satisfied with the work done by each of them.

FREDERICK ENGELS.

London, October 4, 1894.

VOLUME III.

THE PROCESS OF CAPITALIST PRODUCTION AS A WHOLE.

PART I.

THE CONVERSION OF SURPLUS-VALUE INTO PROFIT AND OF THE RATE OF SURPLUS-VALUE INTO THE RATE OF PROFIT.

CHAPTER I.

COST PRICE AND PROFIT.

IN the first volume we analyzed the phenomena presented by the *process of capitalist production,* considered by itself as a mere productive process without regard to any secondary influences of conditions outside of it. But this process of production, in the strict meaning of the term, does not exhaust the life circle of capital. It is supplemented in the actual world by the *process of circulation,* which was the object of our analysis in the second volume. We found in the course of this last-named analysis, especially in part III, in which we studied the intervention of the process of circulation in the process of social reproduction, that the capitalist process of production, considered as a whole, is a combination of the processes of production and circulation. It cannot be the object of this third volume to indulge in general reflections relative to this combination. We are rather interested in lo-

cating the concrete forms growing out of the *movements of capitalist production as a whole* and setting them forth. In actual reality the capitals move and meet in such concrete forms that the form of the capital in the process of production and that of the capital in the process of circulation impress one only as special aspects of those concrete forms. The conformations of the capitals evolved in this third volume approach step by step that form which they assume on the surface of society, in their mutual interactions, in competition, and in the ordinary consciousness of the human agencies in this process.

The value of every commodity produced by capitalist methods is represented by the formula: $C = c + v + s$. If we subtract the surplus-value s from this value of the product, there remains only an equivalent for the value of the capital $c + v$ expended for the elements used in the production of this commodity.

Take it that the production of a certain article requires the expenditure of a capital of 500 p.st., of which 20 p.st. are consumed by the wear and tear of instruments of production, 380 p.st. spent for materials of production, and 100 p.st. for labor-power. And let the rate of surplus-value be 100%. In that case the value of this product is equal to $400\ c + 100\ v + 100\ s$, or 600 p.st.

After deducting the surplus-value of 100 p.st., we have a remaining commodity-capital of 500 p.st., which is only an equivalent for the consumed capital of 500 p.st. This portion of the value of the commodity, which makes good the price of the consumed means of production and the price of the employed labor-power, replaces only the amount paid by the capitalist himself for this commodity and represents, therefore, from his point of view the cost price of this commodity.

However, the cost of this commodity to the capitalist, and the actual cost of this commodity, are two vastly different amounts. That portion of the value of the commodity which consists of surplus-value does not cost the capitalist anything for the reason that it costs the laborer unpaid labor. But on

the basis of capitalist production, the laborer plays the role of an ingredient of productive capital as soon as he has been incorporated in the process of production. Under these circumstances the capitalist poses as the actual producer of the commodity. For this reason the cost price of the commodity to the capitalist necessarily appears to him as the actual cost of the commodity. If we designate the cost-price by k, we can transcribe the formula $C = c + v + s$ into the formula $C = k + s$, that is to say, the value of a commodity is equal to the cost price plus the surplus-value.

In this way the classification of the various values making good the value of the capital consumed in the production of the commodity under the term of cost price expresses, on the one hand, the specific character of capitalist production. The capitalist cost of the commodity is measured by the *expenditure of capital,* while the actual cost of the commodity is measured by the *expenditure of labor.* The capitalist cost-price of the commodity, then, is a quantity different from its value, or its actual cost-price. It is smaller than the value of the commodity. For since $C = k + s$, it is evident that $k = C - s$. On the other hand, the cost-price of a commodity is by no means a mere heading in capitalist bookkeeping. The actual existence of this portion of value continually exerts its practical influence in the actual production of the commodity, because it must be ever reconverted from its commodity-form, by way of the process of circulation, into the form of productive capital, so that the cost-price of the commodity must always buy anew the elements of production consumed in its creation.

However, the cost-price as a heading in bookkeeping has nothing to do with the formation of the value of a commodity, or with the process of self-expansion of capital. When I know that five-sixths of the value of a commodity worth 600 p.st., or 500 p.st., represent but an equivalent for the capital consumed in its production and suffice only for the purchase of new material elements of the same capital, I know nothing as yet of the way in which these five-sixths representing the cost-price of the commodity are produced, nor do I know anything

about the production of the last sixth which constitutes its surplus-value. Nevertheless we shall see in the course of our analysis that the cost-price plays in capitalist economics the false role of a category in the actual production of values.

Let us return to our example. Take it that the value produced by one laborer in an average social working day is represented by 6 shillings in money. In that case the advanced capital of 500 p.st. consisting of 400 c + 100 v represents the values produced in $1666\frac{2}{3}$ working days of ten hours each. Of this amount $1333\frac{1}{3}$ working days are crystallized in the value of the means of production amounting to 400 p.st. (400 c), and $333\frac{1}{3}$ working days are crystallized in the value of labor-power amounting to 100 p.st. (100 v). Having assumed a rate of surplus-value of 100%, the production of the new commodity costs an expenditure of labor-power amounting to 100 v + 100 s, or $666\frac{2}{3}$ working days of ten hours each.

We know, then, as shown in volume I, chapter VII, that the value of the newly created product of 600 p.st. is composed, 1), of the reappearing value of the constant capital of 400 p.st. expended for means of production, and 2), of a newly produced value of 200 p.st. The cost-price of the commodity, or 500 p.st., comprises the reappearing 400 c and one-half of the newly produced value of 200 p.st., that is to say 100 v. In other words, it comprises two elements of the value of the commodity which are of widely different origin.

Owing to the appropriate character of the labor expended during $666\frac{2}{3}$ working days of ten hours each, the value of the means of production consumed in this process, to the amount of 400 p.st., is transferred to the product. This previously existing value thus reappears as an element of the value of the product, but is not created in the process of production of *this commodity*. It exists as an element of the value of this commodity only for the reason that it previously existed as an element of the invested capital. The expended constant capital, then, is replaced by that portion of the value of the commodity which this capital transfers to the commodity of its own accord in the labor-process. This element of the cost-price, therefore, has an ambiguous meaning. On the one

hand it passes into the cost-price of the commodity, because it is an element of that portion of the value of the commodity which replaces consumed capital. And on the other hand it forms an element of the value of the commodity only for the reason that it is the value of consumed capital, or because the means of production cost a certain sum.

It is different with the other element of the cost-price. The 666⅔ working days expended in the production of the commodity create a new value of 200 p.st. One portion of this new value replaces only the advanced variable capital of 100 p.st., which is the price of the labor-power employed. But this advanced capital-value does not participate in the creation of the new value. So far as the advance of capital is concerned, labor-power *counts as a value*. But in the process of production, labor-power performs the function of *creating value*. The place of the mere value of labor-power in the advance of capital is taken in the actual process of productive capital by living labor-power which creates value.

This difference of the various elements of the value of a commodity which constitute the cost-price becomes evident whenever a change takes place either in the amount of the value of the expended constant capital or in that of the expended variable capital. For instance, let the price of the same means of production, or of the constant portion of capital, rise from 400 p.st. to 600 p.st., or fall to 200 p.st. In the first case it is not only the cost-price of the commodity which rises from 500 p.st. to 600 c + 100 v, or 700 p.st., but also the value of the commodity which rises from 600 p.st. to 600 c + 100 v + 100 s, or 800 p.st. In the second case, it is not only the cost-price which falls from 500 p.st. to 200 c + 100 v, or 300 p.st., but also the value of the commodity which falls from 600 p.st. to 200 c + 100 v + 100 s, or 400 p.st. Because the expended constant capital transfers its own value to the product, therefore the value of the product rises or falls with the absolute magnitude of that capital-value, other circumstances remaining the same. But on the other hand let us assume that, other circumstances remaining the same, the price of the same amount of labor-power rises from 100 p.st.

to 150 p.st., or falls from 100 p.st. to 50 p.st. In the first case, the cost-price rises indeed from 500 p.st. to 400 c + 150 v, or 550 p.st., and in the second case it falls from 500 p.st. to 400 c + 50 v, or 450 p.st. But in either case, the value of the commodity remains unchanged at 600 p.st. In the first case it is 400 c + 150 v + 50 s, in the second 400 c + 50 v + 150 s, but in either case it is 600 p.st. The advanced variable capital does not transfer its own value to the product. The place of its value is taken in the product by a new value created by labor. Therefore a change in the value of the absolute magnitude of the variable capital, to the extent that it expresses merely a change in the price of labor-power, does not alter the absolute magnitude of the value of the commodity in the least, because it does not alter anything in the absolute magnitude of the new value created by living labor. Such a change influences only the relative proportion of the magnitudes of the two elements of the new value, one of which forms surplus-value, and the other of which makes good the variable capital and passes into the cost-price of the commodity.

The two elements of the cost-price, in the present case 400 c + 100 v, have only this in common that they are both of them elements of the value of the commodity replacing advanced capital.

But this actual condition of things must necessarily look reversed from the point of view of capitalist production.

The capitalist mode of production is distinguished from a mode of production based on slavery by this fact among others that in the former the value, or the price, as the case may be, of labor-power assumes the form of the value, or price, of labor itself, that is to say, the form of wages. (Volume I, chapter XIX.) The variable portion of the advanced capital, therefore, presents itself as a capital advanced in wages, as a capital-value paying for the value, or price, of all labor expended in production. Take it, for instance, that an average social working day of ten hours is represented by 6 shillings of money. In that case the advance of a variable capital of 100 p.st. expresses in money

the value of a product created in $333\frac{1}{3}$ ten-hour days. But this value, being an element of the advance of capital for the purchase of labor-power, is not an element of the productive capital in the actual performance of its function. Its place in the process of production is taken by living labor-power. If the degree of exploitation of this labor-power is 100%, as it is in our illustration, then it is expended during $666\frac{2}{3}$ ten-hour days, and thereby adds to the product a new value of 200 p.st. On the other hand, the variable capital of 100 p.st. figures in the advance of capital as a capital invested in wages, or as the price of labor performed in $666\frac{2}{3}$ ten-hour days. Dividing 100 p.st. by $666\frac{2}{3}$, we obtain 3 shillings as the price of a working day of ten hours, equal in value to the product of five hours' labor.

Now, if we compare the advance of capital on one side with the value of commodities on the other, we find the following condition of things:

I. Capital advanced 500 p.st., consisting of 400 p.st. of capital expended in means of production (price of means of production) plus 100 p.st. of capital expended in wages (price of $666\frac{2}{3}$ working days, or wages for the same).

II. Value of commodities 600 p.st. of which 500 p.st. represent the cost-price (400 p.st. price of expended means of production plus 100 p.st. price of expended $666\frac{2}{3}$ working days) plus 100 p.st. surplus-value.

In this formula, the portion of capital invested in labor-power differs from that invested in means of production (such as cotton or coal) only by serving for the payment of a substantially different element of production. But it does not differ by serving in a different function in the process of creating the value of the commodities, and thereby in the process of self-expansion of capital. The price of the means of production reappears in the cost-price of the commodities, just as it figured in the advance of capital, and it does so for the reason that the means of production have been appropriately consumed. The cost-price of the commodities also contains the price, or wages, for the $666\frac{2}{3}$ working days consumed in the production of these commodities, which wages

figured also in the advance of capital, likewise for the reason that this amount of labor has been appropriately expended. We see only finished and existing values, representing portions of the value of advanced capital which have passed into the value of the product, but no element representing newly created values. The distinction between constant and variable capital has disappeared. The entire cost-price of 500 p.st. now has the ambiguous meaning that it is that portion of the value of commodities worth 600 p.st. which makes good the capital of 500 p.st. expended in the production of these commodities, and that it owes its existence as a portion of the value of these commodities only to the fact of having previously existed as the cost-price of the consumed elements of production, namely means of production and labor, in other words, of having existed as an advance of capital. The capital-value reappears as the cost-price of commodities, because it had been expended as a capital-value.

The fact that the various elements of the value of the advanced capital have been expended for substantially different elements of production, namely for instruments of labor, raw materials, auxiliary substances, and labor, requires only that the cost-price of the commodities should buy a new supply of these substantially different elements of production. So far as the formation of this cost-price is concerned, only one distinction is appreciable, namely that between fixed and circulating capital. In our example we had set down 20 p.st. for wear and tear of instruments of labor (400 c being composed of 20 p.st. for wear and tear of instruments of labor and 380 p.st. for materials of production). Supposing the value of those instruments of labor to have been 1200 p.st. before the productive process began, it will exist after the production of the commodities in two forms, one of them being represented by 20 p.st. of the value of the commodities, and the other by 1200 — 20, or 1180 p.st., the remaining value of the instruments of labor in the possession of the capitalist, in other words, an element of his productive, not of his commodity-capital. On the other hand, the materials of production and wages, differ from the instruments of labor by being entirely con-

sumed in the production of the commodities and transferring their entire value to that of the produced commodities. We have seen that the turn-over bestows upon these different elements of the advanced capital the forms of fixed and circulating capital.

The advance of capital, according to this, is 1680 p.st., consisting of 1200 p.st. of fixed capital plus 480 p.st. of circulating capital (380 p.st. of which are materials of production and 100 p.st. of which are wages).

But the cost-price of the commodities is only 500 p.st., namely 20 p.st. for the wear and tear of the fixed capital, and 480 p.st. for circulating capital.

This difference between the cost-price of the commodities and the advance of capital merely proves that the cost-price of the commodities is formed exclusively by the capital actually consumed in their production.

In the production of the commodities, instruments of production valued at 1200 p.st. are employed, but only 20 p.st. of this advanced capital are consumed in production. The employed fixed capital, then, passes only partially into the cost-price of commodities, because it is consumed only by degrees in their production. The employed circulating capital passes entirely into the cost-price of commodities, because it is entirely consumed in production. But what else does this prove than that the consumed portions of fixed and circulating capital, in the ratio of the magnitude of their values, pass uniformly into the cost-price of the commodities, and that this portion of the value of commodities originates solely with the capital consumed in their production? If this were not the case, it would be inexplicable why the advanced fixed capital of 1200 p.st. should not add, aside from the 20 p.st. which it loses in the productive process, also the other 1180 p.st. which it does not lose therein.

This difference between fixed and circulating capital with reference to the calculation of the cost-price affirms, we repeat, the apparent origin of the cost-price in the expended capital-value, or in the price paid by the capitalist himself for the expended elements of production, including labor.

On the other hand, the variable portion of capital invested in labor-power is explicitly identified, under the head of circulating capital, with that portion of the constant capital which consists of materials of production, so far as the formation of value is concerned. And by this means the mystification of the process of self-expansion of capital is accomplished.[1]

Hitherto we have considered only one element of the value of commodities, namely the cost-price. We must now occupy ourselves also with the other element of the value of commodities, namely the excess over the cost-price, or the surplus-value. In the first place, then, surplus-value is an excess of the value of a commodity over its cost-price. But since the cost-price is equal to the value of the consumed capital, into whose substantial elements it is continually reconverted, the additional value is an accretion to the capital expended in the production of the commodities and returning by way of the circulation.

We have seen previously that the surplus-value s owes its origin in point of fact to a change in the value of the variable capital v and is, therefore, really but an increment of variable capital. Nevertheless it is also an increment of the expended total capital $c + v$ after the process of production has been completed. The formula $c + (v + s)$, which indicates that s is produced by the conversion of a definite capital-value v, a constant magnitude, into a fluctuating magnitude by means of the labor-power paid by it, may also be represented as $(c + v) + s$. Before production began, we had a capital of 500 p.st. After production is completed, we have the same capital of 500 p.st. plus an increment of value amounting to 100 p.st.[2]

[1] In volume I, chapter IX, 3, we have shown by the example of N. W. Senior what confusion this may create in the head of the economist.

[2] "From what has gone before, we know that surplus-value is purely the result of a variation in the value of v, of that portion of the capital which is transformed into labor-power; consequently, $v + s$ equals $v + v'$, or v plus an increment of v. But the fact that it is v alone that varies, and the conditions of that variation, are obscured by the circumstance that in consequence of the increase of the variable component of the capital there is also an increase in the sum total of the advanced capital. It was originally 500 p.st. and becomes 590 p.st." (Volume I, chapter IX, 1.)

However, the surplus-value is an increment, not only of that portion of the advanced capital which is assimilated by the process of production, but also of that portion which is not assimilated. In other words, it is an accretion, not only to the consumed capital which is made good by the cost-price of commodities, but also to the aggregate capital invested in production. Before the beginning of the production we had a capital valued at 1680 p.st., namely 1200 p.st. of fixed capital invested in instruments of production, only 20 p.st. of which are assimilated in the process by the commodities through wear and tear, plus 480 p.st. of circulating capital invested in materials of production and wages. At the close of the process of production we have 1180 p.st. remaining of the value of the productive capital plus a commodity-capital of 600 p.st. By adding these two amounts, we find that the capitalist now has values amounting to 1780 p.st. After deducting his invested total capital of 1680 p.st., the capitalist pockets a surplus of 100 p.st. In short, the 100 p.st. of surplus-value form as much an increment of the invested 1680 p.st. as of the 500 p.st., or that part of it which was assimilated by the production.

The capitalist understands well enough that this increment of value has its genesis in the productive manipulations of capital, that it is generated out of the capital. For this increment exists at the close of the productive process, while it did not exist at its beginning. So far as the capital assimilated in production is concerned, the surplus-value seems to arise equally from all its different elements consisting of means of production and labor. For all these elements contribute equally to the formation of the cost-price. All of them add their values, which are advanced as capital, to the value of the product, and they are not distinguished as constant and variable magnitudes. This becomes obvious, when we assume for a moment that all assimilated capital consisted either of wages exclusively, or of the values of means of production alone. In the first case, we should then have in place of the commodity-values $400\,c + 100\,v + 100\,s$ the commodity-values $500\,v + 100\,s$. The capital of 500, in-

vested in wages, represents the value of all labor assimilated in the production of the commodity-value of 600 p.st., and therefore it constitutes the cost-price of this entire product. But the way in which this cost-price is formed, and in which the value of the expended capital is reproduced as a portion of the value of the product, is the only process in the formation of the value of this product known to us. We do not know anything of the way in which its surplus-portion of 100 p.st. is formed. It is the same in the second case, in which the value of the commodities would be equal to 500 c + 100 s. We know in either case that the surplus-value arises from a given value, because this value was advanced in the form of productive capital, no matter whether in the form of labor or of means of production. On the other hand, this advanced capital-value cannot form any surplus-value for the sole reason that it has been expended and constitutes the cost-price of the commodities. For the fact that it forms the cost-price of the commodities accounts precisely for the circumstance that it constitutes no surplus-value, but merely an equivalent replacing the expended capital. To the extent that it forms surplus-value it does so not in its specific capacity of expended, but of advanced and invested capital. In short, the surplus-value arises as much out of that portion of the advanced capital which makes good the cost-price of the commodities as out of that portion which is not made up by the cost-price. In other words, it arises equally out of the fixed and circulating components of the invested capital. The total capital serves substantially as the creator of values, the instruments of labor as well as the materials of production and labor. The total capital passes substantially into the actual labor-process, even though only a portion of it is assimilated by the process of self-expansion. This is, perhaps, the very reason why it contributes only in part to the formation of the cost-price, but totally to the formation of the surplus-value. However that may be, the outcome is that surplus-value arises simultaneously from all portions of the invested capital. This deduction may be materially abbreviated, by saying pointedly and briefly in the words of Malthus: "The

capitalist expects equal returns on all parts of the capital advanced by him." [3]

In its alleged capacity of an offspring of the advanced total capital, the surplus-value assumes the change of form known as *profit*. Hence a certain value is capital when it is advanced with a view to generating profit,[4] or profit results from the investment of a value as capital. If we designate profit by p, we may convert the formula $C = c + v + s$, or $k + s$, into the formula $C = k + p$, in other words, *the value of a commodity is equal to the cost-price plus the profit.*

The profit, such as it presents itself here, is the same as the surplus-value, only it has a mystified form, which is a necessary outgrowth of capitalist modes of production. The genesis of the mutation of values must be transferred from the variable portion of capital to the total capital, because no distinction is noticeable between the constant and variable capital in the assumed formation of the cost-price. Because the price of labor-power assumes on one pole the form of wages, surplus-value appears at the other pole in the form of profit.

We have seen that the cost-price of a commodity is smaller than its value. Since C equals $k + s$, it follows that k equals $C - s$. The formula $C = k + s$ reduces itself to $C = k$, or commodity-value equal to cost-price, only when s is zero, a case which never occurs on the basis of capitalist production, although peculiar market combinations may reduce the selling price of commodities to the level of their cost-price, or even below it.

Hence, if a commodity is sold at its value, a profit is realized, which is equal to the excess of its value over its cost-price, or equal to the entire surplus-value incorporated in the value of the commodity. But the capitalist may sell a commodity at a profit even when selling it below its value. For so long as its selling price exceeds its cost-price, even though

[3] Malthus, Principles of Political Economy, second edition, London, 1836, pages 267, 268.

[4] "Capital: that which is expended with a view to profit." Malthus, Definitions in Political Economy. London, 1827, page 86.

it may be below its value, a portion of the surplus-value incorporated in it is always realized and thus a profit made. The value of the commodities in our illustration is 600 p.st., their cost-price 500 p.st. If the commodities are sold at 510, 520, 530, 560 or 590, p.st., they are sold respectively at 90, 80, 70, 40, or 10 p.st. below their value, and yet a profit of respectively 10, 20, 30, 60, or 90 p.st. is realized by their sale. It is evident that selling prices may fluctuate considerably between the value of a commodity and its cost-price. The greater the surplus-element of the value of commodities, the greater is the practical playroom of these fluctuating intermediate prices.

This explains such phenomena of daily occurrence in competition as underselling, abnormally low prices in certain lines of industry, etc.[5] The fundamental law of capitalist competition, which political economy has not understood up to the present time, the law which regulates the general rate of profit and the prices of production determined by it, rests, as we shall see later, on this difference between the value and the cost-price of commodities, and on the resulting possibility to sell a commodity at a profit even below its value.

The minimum limit of the selling price of commodities is indicated by their cost-price. If they are sold below their cost-price, then the consumed elements of productive capital cannot be fully reproduced out of the selling price. If this sort of thing continues, then the value of the advanced capital disappears. This point of view is sufficient to incline the capitalist toward the opinion that the cost-price is essentially the inmost value of commodities, because it is the price required for the bare conservation of his capital. Furthermore, the cost-price of a commodity is the purchase price paid by the capitalist himself for its production, in other words, the purchase price determined by the process of production itself. For this reason, the surplus-value realized by the sale of a certain commodity appears to the capitalist as an excess of its selling price over its value, instead of an excess of its value over its cost-price, so that accordingly the surplus-

[5] Compare volume I, chapter XVII, I.

value incorporated in a commodity is not realized by its sale, but arises out of the sale itself. We have thrown more light on this illusion in volume I, chapter V, under the head of "Contradictions in the General Formula of Capital." We merely revert at this point to that form in which it was reaffirmed by Torrens, among others, as an advance of political economy beyond Ricardo.

"The natural price consisting of the cost of production, or in other words, of the expenditure of capital in the production or manufacture of a commodity, cannot possibly include any profit. . . . If a farmer advances 100 quarters of corn in the cultivation of his fields, and receives in return 120 quarters, the 20 quarters, being a surplus of the product above the investment, form his profit; but it would be absurd to call this surplus, or profit, a part of his expenditure. . . . The manufacturer advances a certain quantity of raw materials, tools, and subsistence for labor, and receives in return a quantity of finished products. This finished product must contain a greater exchange-value than the raw materials, tools, and means of subsistence, by whose advance it was acquired." Torrens concludes, therefore, that the excess of the selling price over the cost-price, or the profit, is due to the fact that the consumers, "by a direct or circuitous exchange yield a certain larger portion of all ingredients of capital than it cost to produce them." [6]

In fact, the excess over a certain magnitude cannot form a part of this magnitude. Therefore the profit, the excess of the value of a commodity over the expenditure of the capitalist, cannot form a part of this expenditure. Hence, if no other element than the advance of the capitalist enters into the formation of the value of a commodity, it is inexplicable that more value should come out of production than went into it, for something cannot come out of nothing. Torrens, however, dodges this creation out of nothing only by transferring it from the sphere of commodity-production to that of commodity-circulation. Profit cannot come out of the production

[6] R. Torrens, An Essay on the Production of Wealth. London, 1821, pages 51–53, and 70–71.

of commodities, says Torrens, for otherwise it would already be contained in the cost of production, and that would not be a surplus over this cost. Profit cannot come out of the exchanges of commodities, replies Ramsay, unless it existed before this exchange. The sum of their values of the exchanged products is evidently not altered by their exchange. It remains the same as before this exchange. Incidentally we remark at this point, that Malthus invokes expressly the authority of Torrens,[7] although he himself explains the sale of commodities above their value differently, or rather does not explain it, since all arguments of this sort ultimately amount to the same thing as the one-time famous negative weight of phlogiston.

In a society ruled by capitalist production, even the non-capitalist producer is dominated by capitalist conceptions. In his last novel, *Les Paysans,* Balzac, who is generally remarkable for his profound grasp of actual conditions, aptly describes how the little peasant, in order to retain the good will of his usurer, performs many small tasks gratuitously for him and fancies that he does not give him anything for nothing, because his own labor does not cost him any cash outlay. The usurer, on the other hand, thereby kills two flies at one stroke. He saves a cash outlay for wages and gets the farmer more and more tangled in the net of the spider of usury, by gradually ruining him through the deviation of his labor from his own fields.

The thoughtless conception that the cost-price of a commodity constitutes its actual value, and that surplus-value arises by selling the product above its value, so that commodities would be sold at their value, if their selling price were equal to their cost-price, that is to say, equal to the price of the means of production plus wages incorporated in them, has been heralded to the world as a newly discovered secret of socialism by Proudhon with his customary charlatanry in the guise of science. In fact, this reduction of the value of commodities to their cost-price constitutes the basis of his People's Bank. We have demonstrated in a preceding chap-

[7] Malthus, Definitions in Political Economy. London, 1853, pages 70, 71.

ter that the various elements of the value of the product may be materialized in proportional parts of the product itself. (Volume I, chapter IX, 2.) For instance, if the value of 20 lbs. of yarn is 30 shillings, containing 24 shillings of means of production, 3 shillings of labor-power, and 3 shillings of surplus-value, then this surplus-value may be represented by $\frac{1}{10}$ of the product, or 2 lbs. of yarn. Now, if these 20 lbs. of yarn are sold at their cost-price, at 27 shillings, then the purchaser receives 2 lbs. of yarn for nothing, or the article is sold $\frac{1}{10}$ below its value. But the laborer has performed the same amount of surplus-labor, only in this case it accrues to the benefit of the purchaser of the yarn, not to its capitalist producer. It would be a mistake to assume that if all commodities were sold at their cost-price the result would be the same as if they had all been sold above their cost-price, at their real value. For even if the value of labor-power, the length of the working day, and the degree of exploitation of labor were the same everywhere, the quantities of surplus-value contained in the values of the various kinds of commodities would be unequal, according to the different organic composition of the capitals advanced for their production.[8]

CHAPTER II.

THE RATE OF PROFIT.

The general formula of capital is M — C — M′. In other words, a certain quantity of values is thrown into circulation for the purpose of drawing a larger quantity out of it. The process by which this larger quantity is *produced* is capitalist production. The process by which this larger quantity is *realized* is the circulation of capital. The capitalist does not produce a commodity on its own account, he does not

[8] "The masses of value and surplus-value produced by different capitals — the value of labor-power being given and its degree of exploitation being equal — vary directly as the amounts of the variable consituents of these capitals, *i.e.*, as their constituents transformed into living labor-power." (Volume I, Chapter IX.)

care for its use-value, nor does he consume it personally. The product in which the capitalist is really interested is not the tangible product itself, but the excess of the value of the product over the value of the capital assimilated by it. The capitalist advances the total capital without regard to the different roles played by its components in the production of surplus-value. He advances all these components uniformly, not merely for the purpose of reproducing the advanced capital, but rather with a view to producing a surplus-value in excess of it. He cannot convert the value of the variable capital advanced by him into a greater value except by its exchange for living labor and by the exploitation of this labor. But he cannot exploit this labor unless he advances at the same time the material requirements for the incorporation of this labor, namely instruments and materials of labor, machinery and raw materials. This he can do only by converting a certain amount of value in his possession into requirements of production. He could not be a capitalist at all, nor undertake to exploit labor, unless he enjoyed the privilege of owning the material requirements of production and finding at hand a laborer who owns nothing but his labor-power. We have already shown in the first volume that it is precisely the ownership of means of production by idlers which converts laborers into wage-workers and idlers into capitalists.

It is immaterial for the capitalist whether he is supposed to advance constant capital in order to make a profit out of his variable capital, or whether he advances variable capital in order to make a profit out of the constant capital; whether he invests money in wages in order to make his machinery and raw materials more valuable, or whether he invests money in machinery and raw materials in order to be able to exploit labor. Although it is only the variable portion of capital which creates surplus-value, it does so only on condition that the other portions, the material requirements of production, are likewise advanced. Seeing that the capitalist can exploit labor only by advancing constant capital, and that he can utilize his constant capital only by advancing variable

capital, he lumps them all together in his imagination, and he is all the more apt to do so as the actual rate of his gain is not calculated on its proportion to the variable, but on its proportion to the total capital, in other words, that it is calculated on the rate of profit, not on the rate of surplus-value. And we shall see that the rate of profit may remain unchanged and yet may express different rates of surplus-value.

The cost of the product includes all those elements of its value which the capitalist has paid, or for which he has thrown an equivalent into circulation. This cost must be made good in order that the capital may merely be preserved, or reproduced in its original magnitude.

The value contained in a certain commodity is equal to the labor-time required for its production, and the sum of this labor consists of paid and unpaid portions. But the expenses of the capitalist consist only of that portion of materialized labor which he paid for the production of the commodity. The surplus-value contained in this commodity does not cost the capitalist anything, while it cost the laborer his labor just as well as that portion for which he is paid, and although it creates value and is embodied in the value of the commodity quite as well as the paid labor. The profit of the capitalist is due to the fact that he offers something for sale for which he has not paid anything. The surplus-value, or the profit, consists precisely of the excess of the value of the commodity over its cost-price, in other words, it consists of the excess of the total amount of labor embodied in the commodity over the paid labor contained in it. The surplus-value, whatever be its genesis, is a surplus above the advanced total capital. The proportion of this surplus to the total capital is expressed by the fraction $\frac{s}{C}$, in which C stands for the total capital. Thus we obtain the rate of profit $\frac{s}{C} = \frac{s}{c+v}$, as distinguished from the rate of surplus-value $\frac{s}{v}$.

The rate of surplus-value measured by the variable capital is called rate of surplus-value. The rate of surplus-value measured by the total capital is called rate of profit. These

two modes of measuring the same magnitude express different conditions or relations of this magnitude, owing to the difference of the two standards of measurement.

The transformation of surplus-value into profit must be deduced from the transformation of the rate of surplus-value into the rate of profit, not vice versa. And the rate of profit is indeed that from which historical research takes its departure. The surplus-value and the rate of surplus-value are, relatively, the invisible and unknown essence, while the rate of profit and the resulting appearance of surplus-value in the form of profit are phenomena which show themselves on the surface.

So far as the individual capitalist is concerned, it is evident that the only thing which interests him is the relation of surplus-value, of the excess of value at which he sells his articles, to the total capital advanced for the production of commodities. On the other hand, the definite relation of this surplus, and its internal connection, with the various components of capital does not interest him, for it is rather to his interest to indulge in vague notions relative to this definite relation and this internal connection.

Although the excess in the value of a commodity over its cost-price is created in the process of production, strictly so called, it is realized in the process of circulation. And it assumes so much more easily the semblance of arising from the process of circulation, as it depends in reality on the market conditions under competition whether any surplus is realized or not, or how much of it. It is not necessary to lose any words at this point about the fact that it is merely a different way of dividing the surplus-value, when a commodity is sold above or below its value, and that this different division, this change of proportions in which different persons share in the surplus-value, does not alter in the least the magnitude or the nature of that value. It is not alone the metamorphoses discussed by us in volume II which take place in the process of circulation, but they are accompanied by actual competition, the sale and purchase of commodities above or below their value, so that the surplus-value realized

by the individual capitalist depends as much on the outcome of the mutual endeavor to outwit one another as on the direct exploitation of labor.

Aside from the working time, the time of circulation exerts its influence in the process of circulation and limits the amount of surplus-value realizable within a certain period. Still other elements arise in the process of circulation and influence the strict process of production. Both the strict process of production and the process of circulation continually intermingle, interpenetrate one another, and thereby incessantly falsify their characteristic marks of distinction. The production of surplus-value, and of value in general, receives new directions in the process of circulation, as we have previously shown. Capital passes through the cycle of its metamorphoses. Finally it steps, so to say, forth out of the internal organism of its life and enters into external conditions of existence, into conditions in which the opposites are not capital and labor, but capital and capital in one case, and individual buyers and sellers in another. The time of circulation and the working time cross one another's paths and seem to determine equally the amount of surplus-value. The original form in which capital and wage-labor meet one another is disguised by the interference of conditions which seem to be independent of them. The surplus-value itself does not appear to be the result of the appropriation of labor-time, but an excess of the selling price of commodities over their cost-price, so that this last named price is easily regarded as their *intrinsic* value, while profit appears as an excess of the selling price of commodities over their immanent value.

It is true, that the nature of the surplus-value impresses itself incessantly upon the consciousness of the capitalist during the process of production. This is shown, among other indications, by his greed for the labor-time of others, to which we called attention in the analysis of surplus-value. But in the first place, the strict process of production is but a fleeting stage passing continually into the process of circulation, just as this does into it, so that the more or less vague inkling of

the source of the gains made in the process of production, the source of the surplus-value, stands at best on the same ground with the idea that the realized surplus is due to a movement of capital in the process of circulation and independent of the process of production, a movement of capital independent of its relation to labor. These phenomena of circulation are quoted by modern economists like Ramsay, Malthus, Senior, Torrens, etc., as direct proofs of the alleged fact that capital, in its mere material existence, independent of any social relation to labor which makes capital of it, may be a source of surplus-value quite as well as labor itself and without its help. In the second place, under the head of expenses, among which wages are classed the same as the price of raw materials, wear and tear of machinery, etc., the appropriation of unpaid labor figures only as a saving in the payment of an article added to the expense, only as a smaller payment for a certain quantity of labor. A saving is recorded in the same way, whenever raw materials are bought more cheaply, or the wear and tear of machinery decreases. In this way the appropriation of surplus-labor loses its specific character. Its characteristic relation to the surplus-value is obscured. And this is greatly facilitated, as shown in volume I, part VI, by the representation of the value of labor-power in the form of wages.

By posing equally as sources of an excess of value (profit), all elements of capital mystify the nature of the capitalist relation.

The way in which surplus-value is transformed into profit via the rate of profit is but a continued development of the perversion of subject and object taking place in the process of production. We have already seen that all subjective forces of labor in that process appeared as productive forces of capital. On the one hand, the value of past labor, which dominates living labor, is incarnated in the capitalist. On the other hand the laborer appears as materialized labor-power, as a commodity. This perverted relationship necessarily produces even under simple conditions of production certain correspondingly perverted conceptions, which repre-

sent a transposition in consciousness, that is further developed by the transformations and modifications of the circulation process proper.

We can see by the example of the Ricardian school that it is a mistake to attempt a development of the laws of the rate of profit directly out of the laws of the rate of surplus-value, or vice versa. In the head of the capitalist they are naturally not distinguished. In the formula $\frac{s}{C}$ the surplus-value is measured by the value of the total capital advanced for its production and partly consumed in it, partly merely invested in it. Indeed, the formula $\frac{s}{C}$ expresses the degree of self-expansion of the total capital advanced, or, to state it in conformity with the conception of the internal organic connection and nature of surplus-value, it indicates the proportion of the variation of the variable capital to the magnitude of the advanced total capital.

The magnitude of the value of the total capital has no direct internal relation to the magnitude of the surplus-value. So far as its material elements are concerned, the total minus the variable capital, in other words, the constant capital, consists of the material ingredients, the instruments and materials of production, required for the materialization of labor. In order that a certain quantity of labor may be incorporated in commodities and thereby produce value, a certain quantity of instruments and materials of production is required. According to the peculiar character of the incorporated labor, a definite technical relation is established between the quantity of labor and the quantity of means of production in which this labor is to be incorporated. To that extent there is also a definite relation between the quantity of surplus-value, or surplus-labor, and the quantity of means of production. For instance, if the necessary labor for the production of wages amounts to 6 hours daily, then the laborer must work 12 hours in order to perform 6 hours of surplus-labor, or produces a surplus-value of 100%. He uses up twice as many means of production in 12 hours as he does in 6. But nevertheless the surplus-value incorporated by him in 6 hours is not directly related to the value of the means of production

used up in those 6, or in those 12 hours. This value is here immaterial. It is only the technically required mass which is important. It does not matter whether the raw materials or instruments of labor are cheap or dear, so long as they have the required use-value and are available in quantities proportioned to the technical demands of the labor to be incorporated in them. Now, if I know that x lbs. of cotton are consumed by one hour's spinning and cost a shillings, then I also know that 12 hours' spinning will consume 12 x lbs. of cotton costing 12 a shillings. And in that case I can calculate the proportion of the surplus-value to the value of the 12 as well as to that of the 6. But the relation of the living labor to the *value* of the means of production enters here only to the extent that a shillings serve as a name for x lbs. of cotton. For a definite quantity of cotton has a definite price, and therefore a definite price may also serve as an index to a definite quantity of cotton, so long as the price of cotton is not changed. If I know that I must let the laborer work for 12 hours, in order to appropriate for my own 6 hours of surplus-labor, and if I know the price of this quantity of cotton needed for 12 hours, then I have a circuitous means of determining the proportion between the price of cotton (as an index of the required quantity) and the surplus-value. But on the other hand, I can never make any conclusions from the price of the raw material as to the quantity that may be consumed by one hour's spinning, but not by 6 hours'. There is, then, no necessary internal connection between the value of the constant capital, nor the value of the total capital $c + v$, and the surplus-value.

If the rate of surplus-value is known and its magnitude given, then the rate of profit expresses nothing else but what it actually is, namely a different way of measuring surplus-value, this being measured by the value of the total capital, instead of the value of that portion of capital from which surplus-value directly originates by way of an exchange with labor. But in reality, in the world of phenomena, the conditions are reversed. Surplus-value is given, but only as an excess of the selling price of commodities over their cost-price.

And it remains a mystery where this surplus is originated, whether it is due to the exploitation of labor in the process of production, or to overcharging the purchaser in the process of circulation, or to both. There is also given the proportion of the surplus-value to the value of the total capital, or the rate of profit. The calculation of this excess of the selling price over the cost-price of commodities on the value of the advanced total capital is very important and natural, because by its means the ratio is actually determined in which the total capital has been expanded, the ratio of its self-expansion. If the rate of profit is made the point of departure, there is no basis on which to make any conclusions regarding the specific relations between the surplus and the variable capital invested in wages. We shall see in a subsequent chapter what funny somersaults Malthus made in trying to get in this way at the secret of the surplus-value and of its specific relation to the variable capital. What the rate of profit actually shows is a uniform relation of the surplus to equal portions of the total capital, which from this point of view does not show any internal differences at all, unless it be that between fixed and circulating capital. And this difference is shown only because the surplus is calculated in two ways. In the first place it is calculated as a simple magnitude, as an excess of the selling price over the cost-price. In this form, the entire circulating capital enters into the cost-price, while of the fixed capital only the wear and tear enters into it. In the second place, the relation of this excess in value to the total value of the advanced capital is calculated. In this case, the value of the fixed capital is taken into the calculation entirely, the same as that of the circulating capital. In other words, the circulating capital enters both times in the same way, while the fixed capital enters the first time in a different, the second time in the same way as the circulating capital. Under these circumstances, the difference between the fixed and circulating capital is the only one which obtrudes itself.

The excess in value, then, if determined by the rate of profit, appears as a surplus generated annually, or during a

definite period of circulation, by the total capital above its own value.

While the rate of profit differs numerically from the rate of surplus-value, the profit and the surplus-value are actually the same thing and numerically equal. However, the profit is a transformed kind of surplus-value, a form in which its origin and the secret of its nature are obscured and extinguished. Profit is, therefore, that disguise of surplus-value which must be removed before the real nature of surplus-value can be discovered. In the surplus-value, the relation between capital and labor is laid bare. But in the relation of capital and profit, that is to say, the relation between capital and that form of surplus-value which appears on one hand as an excess over the cost-price of commodities realized in the process of circulation, and on the other hand as a surplus determined by its relation to the total capital, *the capital appears as a relation to itself*, a relation in which it, as the original amount of value, is distinguished from a new value generated by itself. It is dimly recognized, that capital generates this new value by its movement in the processes of production and circulation. But the way in which this is done is surrounded by mystery, and thus surplus-value seems to be due to hidden qualities inherent in capital itself.

To the extent that we follow up the process of self-expansion of capital, the nature of the relation of surplus-value to capital becomes more and more mystified, and it becomes increasingly difficult to discover the secret of its internal organism.

In this first part, we shall consider the rate of profit as numerically different from the rate of surplus-value, while profit and surplus-value will be treated as the same numerical magnitude having only a different form. In the second part we shall see that the transformation continues and that profit presents itself as a magnitude differing also numerically from surplus-value.

CHAPTER III.

THE RELATION OF THE RATE OF PROFIT TO THE RATE OF SURPLUS-VALUE.

We have stated at the conclusion of the preceding chapter, and repeat it here, that we consider in this entire first part the amount of profit made by a certain capital to be equal to the full amount of surplus-value produced by means of this capital during a certain period of circulation. In other words, we leave aside for the present the fact that this surplus-value is split up into various secondary forms, such as interest on capital, ground-rent, taxes, etc., and that surplus-value is not identical, as a rule, with profit as appropriated on the basis of an average rate of profit, which will be discussed in part II.

So far as the quantity of profit is assumed to be equal to that of surplus-value, its magnitude, and that of the rate of profit, is determined by the relations of simple numerical magnitudes given or ascertainable in every individual case. The analysis, therefore, is first carried on purely on the field of mathematics.

We retain the terms used in volumes I and II. The total capital C consists of constant capital c and variable capital v, and produces a surplus-value s. The ratio of this surplus-value to the advanced variable capital, or $\frac{s}{v}$, is called the rate of surplus-value and designated by s′. Therefore $\frac{s}{v} = s'$, and $s = s'v$. If this surplus-value is calculated on the total capital instead of the variable capital, it is called profit, p, and the ratio of the surplus-value s to the total capital C, or $\frac{s}{C}$, is called the rate of profit, p′. Accordingly, $p' = \frac{s}{C} = \frac{s}{c+v}$. Now, substituting for s its equivalent s′v, we find $p' = s' \frac{v}{C} = s' \frac{v}{c+v}$. And this equation may be expressed by the proportion $p' : s' = v : C$, or in words, the

rate of profit is proportioned to the rate of surplus-value as the variable capital is to the total capital.

This proportion shows that the rate of profit, p′, is always smaller than the rate of surplus-value, s′, because the variable capital, v, is always smaller than the total capital, C, which is the sum of v + c, the variable plus the constant capital. The only exception to this rule is the practically impossible case, in which v = C, that is to say, in which no constant capital, no means of production, are advanced by the capitalist, but only wages.

However, our analysis must take into account a few other elements, which have a determining influence on the magnitude of c, v, and s. We shall mention them briefly.

There is, first, the *value of money*. We may assume this to be constant, throughout our analysis.

In the second place, there is the *turn-over*. We leave this element entirely out of consideration for the present, since its influence on the rate of profit will be treated later on in a special chapter. [We anticipate here only one point, namely that the formula $p' = s' \frac{v}{C}$ is strictly correct only for *one* period of turn-over of the variable capital. But we may make it correct for an annual turn-over by substituting for s′, the simple rate of surplus-value, the factor s′n, meaning the annual rate of surplus-value. The factor n in this term expresses the number of turn-overs of the variable capital during one year. (See chapter XVI, I, volume II.) — F. E.]

In the third place, the *productivity of labor* must be considered. Its influence on the rate of surplus-value has been thoroughly discussed in volume I, part V. The productivity of labor may also exert a direct influence on the rate of profit, at least of an individual capital. It has been demonstrated in volume I, chapter XII, that an individual capital may realize an extra profit, if it operates with a greater productivity than that of the social average and thereby produces its commodities at a lower value than the social average value of the same commodities. However, this case will not be considered for the present, since our premise in this part of the work

is that the commodities are produced under normal social conditions and sold at their values. Hence we assume in each case that the productivity of labor remains constant. Under these circumstances the composition of the values of any capital invested in any line of industry, in other words, the proportion between the variable and constant capital, expresses a definite degree in the productivity of labor. As soon as this proportion is altered by other means than a mere change in the value of the material elements of the constant capital, or a change in the value of wages, it follows that the productivity of labor must likewise undergo a corresponding change. We shall see frequently, for this reason, that alterations affecting the factors c, v, and s imply also changes in the productivity of labor.

The same applies to the three remaining factors, namely the *length of the working day, the intensity of labor, and the wages.* Their influence on the mass and rate of surplus-value has been discussed in detail in volume I. It will be understood, therefore, that notwithstanding our assumption that these three factors remain constant there may be changes in v and s which may imply changes in the magnitude of these determining elements. In this respect we have but to remember that wages influence the quantity of surplus-value and the degree of the rate of surplus-value inversely from the length of the working day and the intensity of labor; that an increase of wages reduces the surplus-value, while a prolongation of the working day and an increase in the intensity of labor add to it.

Take it that a capital of 100 produces with 20 laborers by a working day of 10 hours and a total weekly wage of 20 a surplus-value of 20. Then we have $80\,c + 20\,v + 20\,s$, which implies that s' equal 100% and p' 20%.

Now let the working day be prolonged to 15 hours without an increase of wages. The total value produced by the 20 laborers is thereby increased from 40 to 60, since $10 : 15 = 40 : 60$. Seeing that v, the wages paid to the laborers, remains the same, the surplus-value rises from 20 to 40, and we have $80\,c + 20\,v + 40\,s$, implying that s' equals 200%

and p′ 40%. If, on the other hand, the working day remains unchanged at 10 hours, while wages fall from 20 to 12, the total value produced amounts to 40, but it is differently distributed. For v falls to 12, leaving a remainder of 28 for s. Then we have 80 c + 12 v + 28 s, whereby s′ is raised to $233\frac{1}{3}$%, while the rate of profit, p′, is as 28 to 92, or $30\frac{10}{23}$%.

We see, then, that both a prolongation of the working day (or a corresponding increase in the intensity of labor) and a fall in wages increase the mass, and thus the rate, of surplus-value. On the other hand, a rise in wages, other circumstances remaining the same, would lower the rate of surplus-value. Hence, if v rises through an increase of wages, it does not mean a greater, but only a dearer quantity of labor, and in that case s′ and p′ do not rise, but fall.

This indicates that a change in the working day, in the intensity of labor, and in wages cannot take place without at the same time altering v and s and their proportion, and therefore also p′, which expresses the proportion of s to the total capital c + v. And it is also evident that a change in the proportion of s to v implies a corresponding change in at least one of the three determining elements of labor.

It is precisely this fact which reveals the specific organic relationship of variable capital to the movement of the total capital and its self-expansion, and also its difference from the constant capital. So far as it is a question of the generation of value, the constant capital is significant only for its value. It is immaterial for this question, whether a constant capital of, say, 1,500 p.st. represents 1,500 tons of iron at 1 p.st. each, or 500 tons of iron at 3 p.st. each. The quantity of the actual material, in which the value of the constant capital is incorporated, is immaterial for the question of the formation of value and the rate of profit. This rate varies inversely to the value of the constant capital, no matter what may be the proportion of the increase or decrease of the value of constant capital to the mass of its material elements.

It is different with the variable capital. Not its own value, not the labor incorporated in this capital, are of prime importance, but the fact that its own value implies the setting in motion of a grand total of labor whose quantity it does not express. This grand total of labor differs from the labor expressed in the value of the variable capital and paid by it in that it contains a certain amount of surplus-labor, which is so much greater, the smaller the value of the labor contained in the variable capital. Take it that a working day of 10 hours is equal to 10 shillings. If the necessary labor, which pays for the wages, or makes good the variable capital, is worth 5 shillings, then the surplus-labor amounts to 5 hours, or the surplus-value to 5 shillings. If the necessary labor amounts to 4 hours and is worth 4 shillings, then the surplus-labor is 6 hours and the surplus-value 6 shillings.

Hence, as soon as the value of the variable capital ceases to be an index of the amount of labor actually set in motion by it, as soon as the measure of this index is altered, the rate of surplus-value will vary inversely and at an inverse ratio.

Now let us pass on and apply the previously found equation of the rate of profit, $p' = s' \frac{v}{C}$, to the various cases possible. We shall change the value of the individual factors of $s' \frac{v}{C}$ one after another and ascertain the effect of these changes on the rate of profit. In this way we obtain a number of different cases, which we may regard either as successively altered determinants of one and the same capital, or as different capitals existing side by side and compared with one another, no matter whether they exist in different lines of industry or different countries. In cases where the conception of some of our examples as successive conditions of the same capitals seems forced or impracticable, this objection is set aside by regarding them as illustrations of independent capitals.

We now separate the product $s' \frac{v}{C}$ into its two factors s' and $\frac{v}{C}$. In the first place, we treat s' as a constant factor and analyze the effects of the possible variations of $\frac{v}{C}$. After that we treat the fraction $\frac{v}{C}$ as constant and let s' go through

its possible variations. Finally we treat all factors as variable magnitudes and thereby exhaust all cases from which rules concerning the rate of profit may be derived.

I. *s′ constant,* $\frac{v}{C}$ *variable.*

We make a general formula for this case, which comprises a number of sub-cases. Take two capitals C and C_1, with their respective variable proportions v and v_1, with equal rates of surplus-value s′, and the rates of profit p′ and p_1'. Then $p' = s' \frac{v}{C}$ and $p_1' = s' \frac{v_1}{C_1}$.

Now let us make a proportion of C and C_1, and v and v_1, for instance let the value of the fraction $\frac{C_1}{C} = E$, and that of $\frac{v_1}{v} = e$. Then $C_1 = EC$, and $v_1 = ev$. Substituting in the above equation these values for p_1', C_1 and v_1, we obtain $p_1' = s' \frac{ev}{EC}$. Again, we may deduct a second formula from the above two equations, by transforming them into the equation $p' : p_1' = s' \frac{v}{C} : s' \frac{v_1}{C_1} = \frac{v}{C} : \frac{v_1}{C_1}$. Since the value of a fraction remains the same, if we multiply or divide its numerator or denominator by the same number, we may reduce $\frac{v}{C}$ and $\frac{v_1}{C_1}$, to percentages, that is to say we may make both C and C_1 equal to 100. Then we have $\frac{v}{C} = \frac{v}{100}$ and $\frac{v_1}{C_1} = \frac{v_1}{100}$. We may then drop the denominators in the above proportion and say that $p' : p_1' = v : v_1$. In other words, with any two capitals operating with the same rate of surplus-value the rates of profit are proportioned to one another as the variable capitals are to one another, calculated in percentages on their respective total capitals.

These two formulæ comprise all cases of variation of $\frac{v}{C}$.

Before we analyze these various cases, we make another remark. Since C is the sum of c plus v, of the constant and variable capital, and since the rates of surplus-value and of profit are generally expressed in percentages, it is convenient to assume that the sum of c plus v is also equal to 100, that is to say, to express c and v in percentages. It is immaterial for the determination, not of the mass, but of the rate of profit, whether we say that a capital of 15,000, composed of 12,000 of constant and 3,000 of variable capital, produces a surplus-value of 3,000, or whether we reduce this capital to percentages. So we may say that 15,000 C = 12,000 c + 3,000

v + (3,000 s), or that 100 C = 80 c + 20 v + (20 s). In either case the rate of surplus-value, s′, equals 100% and the rate of profit, p′, 20%.

The same is true in the comparison of two capitals. For instance, if we compare the foregoing capital with another, such as 12,000 C = 10,800 c + 1,200 v + (1,200 s), or 100 C = 90 c + 10 v + (10 s). In the last case, s′ is 100% and p′, 10%. And its comparison with the foregoing capital is easier by percentages.

On the other hand, if it is a question of changes taking place in the same capital, the expression by percentages is rarely convenient, because these peculiar alterations are almost always obliterated thereby. If a capital, expressed in percentages of 80 c + 20 v + 20 s assumes the percentages of 90 c + 10 v + 10 s, we cannot tell whether the change in the composition of percentages is due to an absolute decrease of v or an absolute increase of c, or to both. In order to ascertain this, we must have the absolute magnitudes in figures. But in the analysis of the following individual cases, everything depends on the question of the way in which the variations have been accomplished. Has 80 c + 20 v been changed into 90 c + 10 v by an increase of the constant capital without any change in the variable capital, for instance by changing 12,000 c + 3,000 v into 27,000 c + 3,000 v? Or has the same result been accomplished by leaving the constant capital untouched and reducing the variable capital, for instance by changing the above capital into 12,000 c + 1,333⅓ v (corresponding to a percentage of 90 c + 10 v)? Or have both of the original capitals been changed into 13,500 c + 1,500 v (corresponding once more to percentages of 90 c + 10 v)? It is precisely these cases which we shall have to analyze, and in so doing we must dispense with percentages, or at least employ them only in a minor degree.

1. *s′ and C constant, v variable.*

If v changes its magnitude, then C can remain unaltered only by a change in the opposite direction of c, the other component of C. If C consists originally of 80 c + 20 v, and if v is reduced to 10, then C can remain 100 only by an increase

production. If the working day remains unchanged, say at 10 hours, then the total product also remains unchanged. It was and remains 30. But this amount of 30 is now required to make good the consumed variable capital. The surplus-value would have disappeared. But we had assumed that the rate of surplus-value should remain constant at 50%, the same as in I). This is possible only if the working day is prolonged by one-half, increased to 15 hours. In that case 20 laborers produce in 15 hours a total value of 45, and all conditions would be fulfilled. We should have

II). 90 c + 30 v + 15 s. C would be 120, s′, 50% and p′, $12\frac{1}{2}$%.

Under these circumstances the 20 laborers do not require any more instruments, tools, machines, etc., than in the case of I). Only the raw materials or auxiliary substances would have to be increased by one-half. If there were a fall in the prices of these materials, then the transition from I) to II) under the conditions of our assumed case might very well be accomplished even by an individual capital. And the capitalist would be somewhat compensated by increased profits for any loss incurred through the depreciation of his constant capital.

Now let us assume that the variable capital were to be reduced instead of increased. Then we have but to reverse our example. We have but to assume that II) is the original capital and to pass from II) to I). Then II), or 90 c + 30 v + 15 s changes into I), or 100 c + 20 v + 10 s, and it is evident that this transposition does not alter any of the conditions which regulate the respective rates of profit and their mutual relations.

If v falls from 30 to 20 because the number of laborers is reduced by one-third while the constant capital increases, then we have before us the normal case of modern industry, namely an increasing productivity of labor, an operation of a larger mass of means of production by fewer laborers. That this process is necessarily connected with a simultaneous fall of the rate of profit, will be demonstrated in the third part of this volume.

On the other hand, if v falls from 30 to 20 because the same number of laborers are employed at lower wages, while the working day remains the same, then the total product in values would remain 30 v + 15 s, or 45. Since wages have fallen to 20, the surplus-value would rise to 25, the rate of surplus-value from 50% to 125%, contrary to our assumption. In order to comply with the conditions of our case, the surplus-value, with its rate at 50%, must fall to 10. The total product must, therefore, fall from 45 to 30, and this is possible only by a reduction of the working day by one-third. Then we have, the same as before, 100 c + 20 v + 10 s. C equals 120, s′, 50%, and p′, $8\frac{1}{3}$%.

It need hardly be mentioned that this reduction of the working time with a fall in wages would not occur in practice. But this is immaterial. The rate of profit is a function of several variable magnitudes, and if we wish to know in what manner these variable magnitudes influence the rate of profit, we must analyze the individual effect of each seriatim, regardless of whether such an isolated effect is practicable with one and the same capital or not.

2) *s′ constant, v variable, C changed by the variation of v.*

This case differs from the preceding one only in degree. Instead of c decreasing or increasing by as much as v increases or decreases, c remains constant. Under the modern conditions of great industry and agriculture the variable capital is but a relatively small part of the total capital. For this reason, the increase or decrease of the total capital, so far as either is due to variations of the variable capital, are likewise relatively small.

Let us start out again with a capital I) of 100 c + 20 v + 10 s. C equals 120, s′ 50%, and p′ $8\frac{1}{3}$%. This will then be transformed into II) 100 c + 30 v + 15 s, with C at 130, s′ at 50%, and p′ at $11\frac{7}{13}$%. The opposite case, in which the variable capital would decrease, would be symbolized by the transition from II) to I).

The economic conditions would be essentially the same as in the preceding case, and therefore require no reiteration. The transition from I) to II) implies a decrease in the pro-

that e equals E, that is to say, if the fraction $\frac{v}{C}$ retain the same value even if the fraction is apparently changed, in other words, if its numerator and denominator are multiplied or divided by the same number. It is evident that the capital 80 c + 20 v + 20 s and the capital 160 c + 40 v + 40 s have the same rate of profit, namely 20%, because s′ remains at 100% and $\frac{v}{C}$ represents the same value, whether we write it $\frac{20}{100}$ or $\frac{40}{200}$.

c) The rate of profit arises, when e is greater than E, that is to say, when the variable capital grows at a faster rate than the total capital. If 80 c + 20 v + 20 s becomes 120 c + 40 v + 40 s, then the rate of profit rises from 20% to 25%, because s′ has remained the same and $\frac{v}{C}$ has risen from $\frac{20}{100}$ to $\frac{40}{160}$, or from $\frac{1}{5}$ to $\frac{1}{4}$.

If the variation of v and C follows the same direction, we may look upon this change of magnitude up to a certain degree as though both of them varied in the same proportion, so that $\frac{v}{C}$ would be regarded as unchanged to that extent. Beyond this point only one of them would then vary, and by this means we should reduce this complicated case to one of the preceding simpler ones.

For instance, if 80 c + 20 v + 20 s becomes 100 c + 30 v + 30 s, then the proportion of v to c, and also to C, remains the same up to the point of 100 c + 25 v + 25 s. Up to that point, the rate of profit remains likewise unchanged. We may then take our departure from 100 c + 25 v + 25 s. We find that later increased by 5 and became 30, so that C rose from 125 to 130. This is identical with the second case, that of the simple variation of v and the consequent variation of C. The rate of profit, which was originally 20%, rises by this addition of 5 v to $23\frac{1}{13}$%, always assuming the rate of surplus-value to remain the same.

The same reduction to a simpler case can take place, whenever v and C change their magnitudes in opposite directions. For instance, let us start out once more from 80 c + 20 v + 20 s, and let this become 110 c + 10 v + 10 s. In that case, the rate of profit would have remained the same, if the

variation had proceeded to the point of 40 c + 10 v + 10 s. It would still have been 20%. By adding 70 c to this intermediate form, the rate of profit is lowered to $8\frac{1}{3}\%$. Thus we have reduced this case to a case of variation of one magnitude, namely of c.

Simultaneous variations of v, c, and C, do not, then, offer any new points of analysis. For they may be reduced in the last resort to cases in which only one factor is variable.

Even the only remaining case has actually been covered, namely that in which v and C are numerically unchanged, while their material elements experience a change of value, so that v stands for a changed quantity of assimilated labor and c for a changed quantity of assimilated means of production.

For instance, in the capital 80 c + 20 v + 20 s, let 20 v indicate originally the wages of 20 laborers working 10 hours daily. Then let the wages of each laborer increase from 1 to $1\frac{1}{4}$. In that case 20 v pay only 16 laborers instead of 20. Now, if 20 laborers produce in 200 working hours a value of 40, then 16 laborers will produce in 160 working hours a value of only 32. After deducting 20 v for wages, only 12 would remain for surplus-value. The rate of surplus-value would have fallen from 100% to 60%. But since our assumption is that the rate of surplus-value shall remain constant, the working day would have to be prolonged by one-quarter, from 10 hours to $12\frac{1}{2}$ hours. If 20 laborers, working 10 hours daily, or 200 hours, produce a value of 40, then 16 laborers, working $12\frac{1}{2}$ hours daily, or 200 hours, will produce the same value, and the capital of 80 c + 20 v produces the same surplus-value of 20.

Vice versa, if wages fall to such an extent that 20 v indicates the wages of 30 laborers, then s′ can remain unchanged only in the case that the working day is reduced from 10 to $6\frac{2}{3}$ hours. For $20 \times 10 = 30 \times 6\frac{2}{3} = 200$ working hours.

We have discussed previously in these diverging assumptions, to what extent c may express the same value in money, and yet represent different quantities of means of production corresponding to different conditions. In reality this case

will very rarely be practicable in its purely theoretical form.

As for the change of value of the elements of c, by which their mass is increased or decreased, it touches neither the rate of surplus-value nor the rate of profit, so long as it does not imply a change of magnitude in v.

We have now exhausted all possible cases of variation of v, c, and C in our equation. We have seen that the rate of profit may fall, rise, or remain unchanged, while the rate of surplus-value remains the same, for the least variation in the proportion of v to c, or to C, is sufficient to change the rate of profit.

We have seen, furthermore, that there is everywhere a certain limit in the variation of v where the constancy of s′ becomes economically impossible. Since every one-sided variation of c must also arrive at a certain limit where v can no longer remain unchanged, we find that every possible variation of $\frac{v}{C}$ has certain limits, beyond which s′ must likewise become variable. In the variations of s′, which we shall now discuss, this interaction of the different variable magnitudes of our equation will become still plainer.

II. *s′ variable.*

We obtain a general formula for the rates of profit with variable rates of surplus-value, no matter whether $\frac{v}{C}$ remains constant or not, by converting the equation $p' = s' \frac{v}{C}$ into $p_1' = s_1' \frac{v_1}{C_1}$. Here p_1', s_1', C_1, and v_1 indicate the changed values of p′, s′, C, and v. Then we have $p' : p_1' = s' \frac{v}{C} : s_1' \frac{v_1}{C_1}$. This may be manipulated into

$$p_1' = \frac{s_1'}{s'} \times \frac{v_1}{v} \times \frac{C}{C_1} \times p'.$$

1) *s′ variable,* $\frac{v}{C}$ *constant.*

In this case we have the equations $p' = s' \frac{v}{C}$ and $p_1' = s_1' \frac{v}{C}$. In both of them $\frac{v}{C}$ is equal. Therefore $p' : p_1' = s' : s_1'$. That is to say, the rates of profit of two capitals of the same composition are proportioned as the corresponding two rates of surplus-value. Since it is not a question, in the fraction $\frac{v}{C}$, of the absolute magnitude of v and C, but only of their proportion to one another, this applies to all capitals

of equal composition, whatever may be their absolute magnitude.

$$80\ c + 20\ v + 20\ s;\ C = 100,\ s' = 100\%,\ p' = 20\%.$$
$$160\ c + 40\ v + 20\ s;\ C = 200,\ s' = 50\%,\ p' = 10\%.$$
$$100\% : 50\% = 20\% : 10\%.$$

If the absolute magnitudes of v and C are the same in both cases, then the rates of profit are also proportioned to one another as the *masses* of surplus-value : $p' : p_1' = s'v : s_1'v = s : s_1$. For instance:

$$80\ c + 20\ v + 20\ s;\ s' = 100\%,\ p' = 20\%.$$
$$80\ c + 20\ v + 10\ s;\ s' = 50\%,\ p' = 10\%.$$
$$20\% : 10\% = 100 \times 20 : 50 \times 20 = 20\ s : 10\ s.$$

Now, it is evident that with capitals of equal absolute composition, or equal percentages of composition, the rates of surplus-value can differ only when either the wages, or the length of the working day, or the intensity of labor are different. Take the following three cases:

I. $80\ c + 20\ v + 10\ s;\ s' = 50\%,\ p' = 10\%.$
II. $80\ c + 20\ v + 20\ s;\ s' = 100\%,\ p' = 20\%.$
III. $80\ c + 20\ v + 40\ s;\ s' = 200\%,\ p' = 40\%.$

In the case of I, the total product in values is 30, namely 20 v + 10 s , in II it is 40, in III it is 60. This may come about in three different ways.

First, if the wages are different, so that 20 v expresses in every individual case a different number of laborers. Take it that capital I employs 15 laborers for 10 hours per day at a wage of $1\frac{1}{3}$ p.st. and that these laborers produce a value of 30 p.st. of which 20 p.st. make good the wages and 10 p.st. are surplus-value. If wages fall to 1 p.st., then 20 laborers may be employed for 10 hours, and they will produce a value of 40 p.st., of which 20 p.st. make good wages and 20 p.st. are surplus-value. If wages fall still more, for instance to $\frac{2}{3}$ p.st., then 30 laborers may be employed for 10 hours, and they will produce a value of 60 p.st., 40 p.st. of which will represent surplus-value after deducting 20 p.st. for wages.

This case, in which the percentages of composition of the capital, the working day, the intensity of labor, are constant, while the rate of surplus-value varies on account of the varia-

tion of wages, is the only one in which Ricardo's assumption is correct, to-wit, that "profits would be high or low, exactly in proportion as wages would be low or high." (Principles, chapter I, section III, page 18 of the "Works of D. Ricardo," edited by MacCulloch, 1852.)

Secondly, if the intensity of labor varies. In that case 20 laborers produce with the same means of production in 10 hours of daily labor 30 pieces of a certain commodity in I, 40 pieces in II, and 60 pieces in III. Every piece represents, aside from the value of the means of production incorporated in it, a new value of 1 p.st. Since every 20 pieces make good the wages of 20 p.st., there remain 10 pieces at 10 p.st. for surplus-value in I, 20 pieces at 20 p.st. in II, and 40 pieces at 40 p.st. in III.

Thirdly, the working day may vary in length. If 20 laborers work with the same intensity for 9 hours in I, 12 hours in II, and 18 hours in III, then their total products, 30 :40 : 60 vary in the proportions 9 : 12 : 18. And since wages are 20 in every case, the surplus-value is 10, or 20, or 40 respectively.

An increase or decrease in wages, then, influences the rate of surplus-value, and, since $\frac{v}{C}$ was assumed as constant, also the rate of profit, inversely, while an increase or decrease in the intensity of labor, a lengthening or shortening of the working day, influence them in the same direction.

2) *s′ and v variable, C constant.*

In this case the following proportion applies: $p' : p_1' = s' \frac{v}{C} : s_1' \frac{v_1}{C} = s'v : s_1'v_1 = s : s_1$.

The rates of profit are proportioned to one another as the corresponding masses of surplus-value.

A variation of the rate of surplus-value, while the variable capital remains constant, signifies a change in the magnitude and distribution of the product in values. A simultaneous variation of v and s′ also implies always a change in the distribution, but not always a change in the magnitude of the product in values. Three cases are possible.

a) The variation of v and s′ takes place in opposite directions, but by the same amount, for instance:

$80\,c + 20\,v + 10\,s$; $s' = 50\%$, $p' = 10\%$.
$90\,c + 10\,v + 20\,s$; $s' = 200\%$, $p' = 20\%$.

The product in values is equal in both cases, hence the quantity of labor performed likewise: $20\,v + 10\,s = 10\,v + 20\,s = 30$. The difference is only that in the first case 20 are paid for wages and 10 remain for surplus-value, while in the second case wages are 10 and surplus-value 20. This is the only case in which the number of laborers, the intensity of labor, and the length of the working day remain unchanged, while v and s′ vary.

b) The variation of s′ and v takes place in opposite directions, but not by the same amount. In that case the variation of either v or s′ is the greater.

I. $80\,c + 20\,v + 20\,s$; $s' = 100\%$, $p' = 20\%$.
II. $72\,c + 28\,v + 20\,s$; $s' = 71\frac{3}{7}\%$, $p' = 20\%$.
III. $84\,c + 16\,v + 20\,s$; $s' = 125\%$, $p' = 20\%$.

Capital I pays for a product in values amounting to 40 with 20 v, II a value of 48 with 28, and III a value of 36 with 16. Both the product in values and the wages have changed. But a change in the product in values means a change in the amount of labor performed, and this implies a change either in the number of laborers, the hours of labor, or the intensity of labor, or in more than one of these.

c) The variation of s′ and v takes place in the same direction. In that case it intensifies the effect of either.

$90\,c + 10\,v + 10\,s$; $s' = 100\%$, $p' = 10\%$.
$80\,c + 20\,v + 30\,s$; $s' = 150\%$, $p' = 30\%$.
$92\,c + 8\,v + 6\,s$; $s' = 75\%$, $p' = 6\%$.

In these cases the three products in value are also different namely 20, 50, and 14. And this difference in the magnitude of the respective quantities of labor reduces itself once more to a difference in the number of laborers, the hours of labor, and the intensity of labor, or of several or all of these factors.

3) *s′, v and C variable.*

This case offers no new points of view and is solved by the general formula given under II, in which s′ is variable.

The effect of a change in the magnitude of the rate of surplus-value on the rate of profit is summed up, according to the foregoing, by the following cases:

1) p′ increases or decreases in the same proportion as s′, if $\frac{v}{C}$ remains constant.

$$80\ c + 20\ v + 20\ s;\ s' = 100\%,\ p' = 20\%.$$
$$80\ c + 20\ v + 10\ s;\ s' = 50\%,\ p' = 10\%.$$
$$100\% : 50\% = 20\% : 10\%.$$

2) p′ rises or falls at a greater rate than s′, if $\frac{v}{C}$ moves in the same direction as s′, that is to say, if $\frac{v}{C}$ increases or decreases when s′ increases or decreases.

$$80\ c + 20\ v + 10\ s;\ s' = 50\%,\ p' = 10\%.$$
$$70\ c + 30\ v + 20\ s;\ s' = 66\tfrac{2}{3}\%,\ p' = 20\%.$$
$$50\% : 66\tfrac{2}{3}\% < 10\% : 20\%.$$

3) p′ rises or falls at a smaller rate than s′, if $\frac{v}{C}$ changes in the opposite direction from s′, but at a smaller rate.

$$80\ c + 20\ v + 10\ s;\ s' = 50\%,\ p' = 10\%.$$
$$90\ c + 10\ v + 15\ s;\ s' = 150\%,\ p' = 15\%.$$
$$50\% : 150\% > 10\% : 15\%.$$

4) p′ rises, while s′ falls, or falls while s′ rises, if $\frac{v}{C}$ changes in the opposite direction and at a greater rate than s′.

$$80\ c + 20\ v + 20\ s;\ s' = 100\%,\ p' = 20\%.$$
$$90\ c + 10\ v + 15\ s;\ s' = 150\%,\ p' = 15\%.$$

s′ has risen from 100% to 150%, p′ has fallen from 20% to 15%.

5) Finally, p′ remains constant, while s′ rises or falls, if $\frac{v}{C}$ changes in the opposite direction, but at exactly the same rate, as s′.

It is only this last case which requires some further explanation. We observed in the variations of $\frac{v}{C}$ that the same rate of surplus-value may be an expression of different rates of profit. We see now that the same rate of profit may be based on different rates of surplus-value. So long as s′ is constant, any change in the proportion of v to C is sufficient to call forth a difference in the rate of profit. But if s′ varies in magnitude, it requires a corresponding inverse change of $\frac{v}{C}$ in order that the rate of profit may remain the same. This happens but exceptionally in the case of one and the same

capital, or of two capitals in one and the same country. Take it that we have a capital 80 c + 20 v + 20 s; C = 100, s′ = 100%, p′ = 20%. And let us assume that wages fall to such an extent that the same number of laborers may be bought for 16 v instead of 20 v. Then we have released 4 v, and other circumstances remaining the same, our capital will have the composition 80 c + 16 v + 24 s; C = 96, s′ = 150%, p′ = 25%. In order that p′ may be 20%, as before, the total capital would have to increase to 120, the constant capital, therefore, to 104, thus, 104 c + 16 v + 24 s; C = 120, s′ = 150%, p′ = 20%.

This would be possible only if the fall in wages were accompanied by a change in the productivity of labor, which would require such a change in the composition of capital. Or, it might be that the money value of the constant capital would increase from 80 to 104. In short, it would require an accidental coincidence of conditions such as occurs very rarely. In fact, a variation of s′ which does not imply a simultaneous variation of v, and thus of $\frac{v}{C}$ is practicable only under very definite conditions. It may happen in lines of industry in which only fixed capital and labor are employed, while the materials of labor are supplied by nature.

But this is not so in the comparison of the rates of profit of two different countries. For in that case the same rate of profit is based as a rule on different rates of surplus-value.

It follows from all of these five cases that a rising rate of profit may be the companion of a falling or rising rate of surplus-value; a falling rate of profit go hand in hand with a rising or falling rate of surplus-value; a constant rate of profit exist by the side of a rising or falling rate of surplus-value. And we have seen under No. 1 that a rising, falling, or constant rate of profit may be based on a constant rate of surplus-value.

The rate of profit, then, is determined by two main factors, namely the rate of surplus-value and the composition of the value of capital. The effects of these two factors may be briefly summed up in the manner stated hereafter. We may, in this summing up, express the composition of capital in per-

centages, for it is immaterial for this point which one of the two portions of capital is the cause of variation.

The rates of profits of two different capitals, or of one and the same capital in two different successive conditions, *are equal*

1) If the percentages of composition of capital are the same and the rates of surplus-value equal.

2) If the percentages of composition are not the same, and the rates of surplus-value unequal, provided that the products of the multiplication of the rates of surplus-value by the percentages of the variable portions of capital (s′ and v) are the same, that is to say, the *masses* of surplus-value ($s = s'v$) calculated in percentages on the total capital; in other words, if the factors s′ and v are inversely proportioned to one another in both cases.

They are unequal

1) If the percentages of composition are equal and the rates of surplus-value unequal, in which case the rates of profit are proportioned as the rates of surplus-value.

2) If the rates of surplus value are the same and the percentages of composition unequal, in which case the rates of profit are proportioned as the variable portions of capital.

3) If the rates of surplus value are unequal and the percentages of composition not the same, in which case the rates of profit are proportioned as the products s′v, that is to say, as the *masses* of surplus-value calculated in percentages on the total capital.[10]

[10] The manuscript contains also very detailed calculations of the difference between the rate of surplus-value and the rate of profit ($s' - p'$); these show very interesting peculiarities and their movement indicates the cases in which the two rates draw apart or approach one another. These movements may be represented by curves. I do not reproduce this material, because it is of less importance for the immediate purposes of this work. It is enough to call the attention of those readers to this fact who wish to follow up this line of inquiry.— F. E.

CHAPTER IV.

THE EFFECT OF THE TURN-OVER ON THE RATE OF PROFIT.

The effect of the turn-over on the production of surplus-value, and consequently of profit, has been discussed in volume II. It may be briefly summarized in the statement that the entire capital cannot be employed all at once in production, because the turn-over requires a certain lapse of time; for this reason a portion of the capital is always lying fallow, either in the form of money-capital, of a supply of raw materials, of finished but still unsold commodity-capital, or of outstanding bills not yet due; hence the capital active in the production and appropriation of surplus-value is always short by this amount, and the production and appropriation of surplus-value is curtailed to that extent. The shorter the period of turn-over, the smaller is the fallow portion of capital as compared with the whole, and the larger will be the appropriated surplus-value, other conditions remaining the same.

It has been shown explicitly in the second volume to what extent the mass of the produced surplus-value is augmented by the reduction of the period of turn-over, or of one of its two sections, the time of production and the time of circulation. But it is evident that any such reduction increases the rate of profit, since this rate expresses but the mass of surplus-value produced in proportion to the total capital employed in production. Whatever has been said in the second part of the second volume in regard to surplus-value, applies just as well to profit and the rate of profit, and requires no repetition at this place. We shall touch only upon a few of the principal points.

A reduction of the time of production is mainly due to an increase in the productivity of labor, a thing commonly called the progress of industry. If this does not require at once a

considerable extra-outlay of capital for expensive machinery, etc., and thus a reduction of the rate of profit, which is calculated on the total capital, this rate must rise. And this is decidedly the case with many of the latest improvements in metallurgy and chemical industry. The recently discovered methods of making iron and steel, such as the processes of Bessemer, Siemens, Gilchrist-Thomas, etc., shorten formerly tedious processes to a minimum with relatively small expense. The making of alizarin, a red coloring substance extracted from coal-tar, produces in a few weeks, by the help of already existing installations for the manufacture of coal-tar colors, the same results which formerly required years. It took at least one year to mature the plants from which this coloring matter was formerly extracted, and it was customary to let them grow a few years before the roots were used for the purpose of making color.

The time of circulation is reduced principally by improved means of communication. In this respect the last fifty years have brought about a revolution, which can be compared only with the industrial revolution of the last half of the eighteenth century. On land the macademized road has been displaced by the railroad, on sea the slow and irregular sailing vessel by the rapid and regular steamboat line, and the entire globe has been circled by telegraph wires. The Suez Canal has fully opened Eastern Asia and Australia for steamer traffic. The time of circulation of a shipment of commodities to Eastern Asia was at least twelve months as late as 1847, and it has now been reduced to almost as many weeks. The two large centers of commercial crises, 1825-1857, America and India, have been brought from 70 to 90 per cent. nearer to Europe by this revolution of the means of communication, and have thereby lost a good deal of their explosive nature. The period of turn-over of the world's commerce has been reduced to the same extent, and the productive capacity of the capital engaged in it has been doubled or trebled. It goes without saying that this has not been without effect on the rate of profit.

In order to view the effect of the turn-over of the total

capital on the rate of profit in its purest form, it is necessary to assume all other conditions of two compared capitals as equal. Aside from the rate of surplus-value and the working day it is especially the percentages of composition which we assume to be the same. Now let us select a capital A composed of 80 c + 20 v = 100 C. Let this have a rate of surplus-value of 100%, and let it be turned over twice per year.

The annual product is then 160 c + 40 v + 40 s. But for the purpose of ascertaining the rate of profit we do not calculate the 40 s on the turned-over capital-value of 200. We calculate it on the advanced capital of 100, and we obtain thus a rate of profit of 40%.

Now let us compare this with a capital B composed of 160 c + 40 v = 200 C, which has the same rate of surplus-value, 100%, but which is turned over only once a year.

The annual product of this capital is the same as that of A, namely 160 c + 40 v + 40 s. But the 40 s in this case are to be calculated on an advance of capital amounting to 200, so that the rate of profit of B is only 20%, or one-half that of A.

We find, then, that with capitals with equal percentages of composition, equal rates of surplus-value, and equal working days, the rates of profit are proportioned inversely as their periods of turn-over. If either the composition, or the rates of surplus-value, or the working day, or the wages, are unequal in the two compared cases, then other differences are naturally produced in the rates of profit. But these are not directly dependent on the turn-over, and do not concern us at this point. They have already been discussed in chapter III.

The direct effect of a reduced period of turn-over on the production of surplus-value, and consequently of profit, consists in the increased effectiveness given thereby to the variable portion of capital, as shown in volume II, chapter XVI, *The Turn-Over of Variable Capital.* It was demonstrated in that chapter that a variable capital of 500, which is turned over ten times per year, produces during this time as much surplus-value as a variable capital of 5,000 with the same

rate of surplus-value and the same wages, turned over once a year.

Take a capital (I) consisting of 10,000 fixed capital, with an annual wear and tear of 10%, or 1,000, furthermore of 500 circulating constant and 500 variable capital. Let the rate of surplus-value be 100%, and let the variable capital be turned over ten times per year. For the sake of simplicity we assume in all following examples that the circulating constant capital is turned over in the same time as the variable, which is generally the case in practice. Then the product of one such period of turn-over will be

$$100\ c\ (\text{wear}) + 500\ c + 500\ v + 500\ s = 1{,}600.$$

And the product of one entire year, with ten such turn-overs, will be

$$1{,}000\ c\ (\text{wear}) + 5{,}000\ c + 5{,}000\ v + 5{,}000\ s = 16{,}000.$$

Then C is 11,000, s is 5,000, p′ is $\frac{5000}{11000}$, or $45\frac{5}{11}\%$.

Now let us take another capital (II), composed of 9,000 fixed capital, with an annual wear and tear of 1,000, circulating constant capital 1,000, variable capital 1,000, rate of surplus-value 100%, number of annual turn-overs of variable capital 5. Then the product of each one of these turn-overs of the variable capital will be

$$200\ c\ (\text{wear}) + 1{,}000\ c + 1{,}000\ v + 1{,}000\ s = 3{,}200.$$

And the annual product (of all five turn-overs) will be

$$1{,}000\ c\ (\text{wear}) + 5{,}000\ c + 5{,}000\ v + 5{,}000\ s = 16{,}000.$$

Then C is 11,000, s is 5,000, and p′ is $\frac{5000}{11000}$, or $45\frac{5}{11}\%$.

Take furthermore a third capital (III) with no fixed capital, 6,000 circulating constant capital, and 5,000 variable capital. Let the rate of surplus-value be 100%, and let there be one turn-over per year. Then the total product of one year is

$$6{,}000\ c + 5{,}000\ v + 5{,}000\ s = 16{,}000.$$

C is 11,000, s is 5,000, and p′ is $\frac{5000}{11000}$, or $45\frac{5}{11}\%$.

In other words, we have in all three of these cases the same annual mass of surplus-value, namely 5,000, and since the total capital is likewise the same in all three cases, namely 11,000, the rate of profit is also the same, namely $45\frac{5}{11}\%$.

But now let us assume that capital (I) has only 5 instead

of 10 turn-overs of its variable capital per year. In that case the outcome is different. The product of one turn-over is then 200 c (wear) + 500 c + 500 v + 500 s = 1,700. And the product of one year is

1,000 c (wear) + 2,500 c + 2,500 v + 2,500 s = 8,500.

C is 11,000, s is 2,500, p′ is $\frac{2500}{11000}$, or $22\frac{8}{11}\%$. The rate of profit has fallen by one-half, because the time of turn-over has been doubled.

The amount of surplus-value appropriated during one year is therefore equal to the mass of surplus-value appropriated during one turn-over of the *variable* capital multiplied by the number of such turn-overs per year. If we call the surplus-value, or profit, appropriated during one year S, the surplus-value appropriated during one period of turn-over of the variable capital s, the number of turn-overs of the variable capital in one year n, then S = sn, and the annual rate of surplus-value S′ = s′n, as demonstrated in Volume II, chapter XVI, I.

It is understood that the formula $p' = s' \frac{v}{C} = s' \frac{v}{c+v}$ is correct only so long as the v of the numerator is the same as that of the denominator. In the denominator v stands for the entire portion of the total capital used on an average as variable capital for the payment of wages. In the numerator, v is determined in the first place by the fact that a certain amount of surplus-value s is produced and appropriated by it. The proportion of this surplus-value to the variable capital, $\frac{s}{v}$, constitutes the rate of surplus-value. It is only in this way that the formula $p' = \frac{s}{c+v}$ is transformed into $p' = s' \frac{v}{c+v}$. Now the v of the numerator is more definitely described by stating that it must be equal to the v of the denominator, that is to say equal to the entire variable capital of C. In other words, the equation $p' = \frac{s}{C}$ can be transformed into the equation $p' = s' \frac{v}{c+v}$ only in the case that s stands for the surplus-value produced in *one* turn-over of the variable capital. If s stands for only a portion of this surplus-value, then $s = s'v$ is still correct, but this v is then smaller than the v in C = c + v, because less than the entire variable capital has been

employed in the payment of wages. On the other hand, if s stands for more than the surplus-value of one turn-over of v, then a portion of this v, or perhaps the whole, serves twice, namely in the first and in the second turn-over, and eventually it may serve in the subsequent turn-overs. The v which produces the surplus-value, and which represents the sum of all paid wages, is then greater than the v in c + v and the calculation becomes wrong.

In order that the formula for the annual rate of profit may be exact, we must substitute the annual rate of surplus-value for the simple rate of surplus-value, we must substitute S′ or s′n for s′. In other words, we must multiply the rate of surplus-value, s′, or, what amounts to the same, the variable capital v contained in C, with n, the number of turn-overs of this variable capital in one year. Thus we obtain $p' = s'n\frac{v}{C}$, which is the formula for the calculation of the annual rate of profit.

In most cases the capitalist himself does not know the amount of variable capital invested in his business. We have seen in chapter VIII of volume II, and shall see further along, that the only distinction which forces itself upon the capitalist within his capital is that of fixed and circulating capital. From the cash-box containing the money-part of the circulating capital in his hands, so far as it is not deposited in a bank, he takes the money to pay wages, and from the same cash-box he takes the money for raw and auxiliary materials. And he credits both expenditures to the same cash account. And even if he should keep a separate account for wages, it would show at the end of the year the amounts paid out for wages, that is vn, but not the variable capital v itself. In order to ascertain this, he would have to make a special calculation, of which we propose to give an illustration.

We select for this purpose the cotton spinnery of 10,000 mule spindles described in volume I. We assume that the data there given for one week of April, 1871, are in force during the whole year. The fixed capital incorporated in the machinery was valued at 10,000 p.st. The circulating capital was not given. We assume it to have been 2,500 p.st.

This is a rather high estimate, but it is justified by the assumption, which we must always make in this discussion, that no credit was in force, in other words, no permanent or temporary employment of other people's capital. The value of the weekly product was composed of 20 p.st. for wear of machinery, 358 p.st. of circulating constant capital (rent 6 p.st., cotton 342 p.st., coal, gas, oil, 10 p.st.), 52 p.st. of variable capital paid out for wages, and 80 p.st. of surplus-value. The formula was, therefore

$$20\ c\ (\text{wear}) + 358\ c + 52\ v + 80\ s = 510.$$

The weekly advance of circulating capital consisted therefore of 358 c + 52 v = 410, and its percentages of composition were 87.3 c + 12.7 v. Calculating the entire circulating capital of 2,500 p.st., on this basis, we obtain 2,182 p.st. of constant and 318 p.st. of variable capital. Since the total expenditure for wages in one year was 52 times 52 p.st., or 2,704 p.st., it follows that the variable capital of 318 p.st. was turned over almost exactly 8½ times in one year. The rate of surplus-value was $\frac{80}{52}$, or $153\frac{11}{13}\%$. We calculate the rate of profit from these elements by inserting the above values in the formula $p' = s'n\frac{v}{C}$. Since s′ is $153\frac{11}{13}$, n is 8½, v is 318, and C is 12,500, we have

$$p' = 153\tfrac{11}{13} \times 8\tfrac{1}{2} \times \tfrac{318}{12{,}500} = 33.27\%.$$

We test this result by means of the simple formula $p' = \frac{s}{C}$. The total surplus-value or profit, of one year amounts to 52 times 80 p.st., or 4,160 p.st. Dividing this by the total capital of 12,500, we obtain 33.28%, or almost the identical result. This is an abnormally high rate of profit, due to the extraordinarily favorable conditions of the moment (very low prices of cotton and very high prices of yarn). In reality this rate was certainly not maintained throughout the year.

The term s′n in the formula $p' = s'n\ \frac{v}{C}$ stands for the same thing which was called the annual rate of surplus-value in volume II. In the above case it is $153\frac{11}{13}\%$ multiplied by 8½, or in exact figures $1{,}307\frac{9}{13}\%$. A certain brave soul was shocked to the point of speechlessness over the abnormity of an annual rate of profit of 1,000%, which had been used as

an illustration in that volume. Perhaps he will now settle down peacefully and contemplate this annual rate of surplus-value of more than 1,300% taken from the practical life of Manchester. In times of greatest prosperity, such as we have not seen for a long time, a similar rate is by no means rare.

By the way, this is an illustration of the actual composition of capital in modern great industry. The total capital is divided into 12,182 p.st. of constant and 318 p.st. of variable capital, a total of 12,500 p.st. In percentages this is $97\frac{1}{2}\ c + 2\frac{1}{2}\ v = 100\ C$. Only one-fortieth of the total capital serves for the payment of wages, but it is turned over eight times during the year.

Since very few capitalists take the trouble of making similar calculations with reference to their own business, the science of statistics is almost completely silent regarding the proportion of the constant portion of the total social capital to its variable portion. Only the American Census gives what is possible under modern conditions, namely the amount of wages paid in each line of business and the profits realized. These data are, of course, very doubtful, because they are based on uncontrollable statements of the capitalists, but they are nevertheless very valuable, and the only records available on this subject. In Europe we are far too delicate to expect such revelations from our great capitalists.— F. E.]

CHAPTER V.

ECONOMIES IN THE EMPLOYMENT OF CONSTANT CAPITAL.

I. *General Economies.*

The increase of absolute surplus-value, or the prolongation of surplus-labor and thus of the working day, while the variable capital remains the same and employs the same number of laborers at the same nominal wages, no matter whether overtime is paid for or not, reduces relatively the value of the constant capital as compared to the total and the varia-

ble capital, and thereby increases the rate of profit even aside from the growth and mass of surplus-value and a possibly rising rate of surplus-value. The volume of the fixed portion of constant capital, such as factory buildings, machinery, etc., remains the same, no matter whether they serve for 16 or for 12 hours in the labor-process. A prolongation of the working day does not require any new expenditures for this most expensive portion of the constant capital. Furthermore, the value of the fixed capital is thereby reproduced in a smaller number of periods of turn-over, so that the time for which it must be advanced in order to make a certain profit is abbreviated. A prolongation of the working day therefore increases the profit, even if overtime is paid, or even if it is paid better, up to a certain limit, than the normal hours of labor. The ever more pressing necessity for the increase of fixed capital in modern industry was therefore one of the main reasons which induced profit-loving capitalists to prolong the working day.[11]

The same conditions do not obtain if the working day is constant. In that case it is necessary either to increase the number of laborers and with them to a certain extent the mass of fixed capital (buildings, machinery, etc.), in order to exploit a greater quantity of labor (for we leave aside the question of deductions from wages or depression of wages below their normal level), or, if the intensity of labor and the productivity of labor are to be augmented and more relative surplus-value produced, the quantity of the circulating portion of constant capital increases in those lines which use raw materials, since more raw material is worked up within a certain time. And in the second place, the mass of machinery set in motion by the same number of laborers also increases, in other words, both portions of constant capital increase. An increase in surplus-value, then, is accompanied by a growth of the constant capital, the growing exploitation of labor goes hand in hand with a heightened expenditure of the means of

[11] Since in all factories a very large amount of fixed capital is invested in buildings and machinery, the gains will be so much larger the greater the number of hours during which this machinery can be kept employed." (Reports of Factory Inspectors, October 31, 1858, p. 8.)

production by which labor is exploited, in other words, a greater investment of capital. The rate of profit is therefore reduced on one side while it increases on the other.

Quite a number of running expenses remain almost or entirely the same, whether the working day is long or short. The cost of supervision is smaller for 500 working men during 18 working hours than for 750 working men during 12 working hours. "The running expenditures of a factory at ten hours of labor are almost as high as at twelve hours." (Report of Factory Inspectors, October, 1848, page 37.) State and municipal taxes, fire insurance, wages of various permanent employes, depreciation of machinery, and various other expenses of a factory, run on just the same, whether the working time is long or short. To the extent that production decreases, these expenses rise as compared to the profit. (Reports of Factory Inspectors, October, 1862, page 19.)

The period in which the value of machinery and of other components of fixed capital is reproduced is practically determined, not by the mere duration of time, but by the duration of the entire labor-process during which it serves and wears out. If the laborers must work 18 hours instead of 12, it makes a difference of three days per week, so that one week is stretched into one and a half, and two years into three. If this overtime is not paid for, then the laborers supply the capitalists not only with the normal surplus-labor without receiving an equivalent, but also give one week out of every three, and one year out of every three, for nothing. In this way the reproduction of the value of the machinery is speeded up by 50% and accomplished in two-thirds of the time which would be ordinarily required.

We start in this analysis, and in that of the fluctuations of the prices of raw materials (chapter VI), from the assumption that the mass and rate of surplus-value are given quantities, in order to avoid useless complications.

We have already shown in our presentation of co-operation, of division of labor and machinery, that economies in the conditions of production, such as are found in production on a large scale, are mainly due to the fact that these conditions

are social ones growing out of the combination of labor-processes. The means of production are worked up by the aggregate laborer, a co-operation of many laborers on an immense scale, instead of by laborers operating in a disconnected way or co-operating at best on a small scale. In a large factory with one or two central motors the cost of these motors does not increase at the same rate as their horse-powers and their resulting extension of activity. The cost of transmission of power does not grow at the same rate as the number of working machines set in motion by it. The frame of any individual machine does not become dearer at the same rate as the number of tools which it employs as its organs. And so forth. The concentration of means of production furthermore saves buildings of various sorts, not only for actual working rooms, but also for storage sheds, etc. It is the same with expenses for fuel, light, etc. Other conditions of production remain the same, whether used by many or by few.

This entire line of economies arising from the concentration of means of production and their use on a large scale has for its fundamental basis the accumulation and co-operation of working people, the social combination of labor. Hence it has its source quite as much in the social nature of labor as the surplus-value considered individually has its source in the surplus-labor of the individual laborer. Even the continual improvements possible and necessary in this line are due solely to the social experiences and observations made in production on a large scale through the combination of social labor.

The same is true of the second great branch of economies in the conditions of production. We refer to the reconversion of the excrements of production, the so-called offal, into new elements of production, either of the same, or of some other line of industry; the processes by which these so-called excrements are thrown back into the cycle of production and consequently of consumption, whether productive or individual. This line of economies, which we shall examine more closely later on, is likewise the result of social labor on a large scale. It is the abundance of these excrements due to large scale pro-

duction which renders them available for commerce and turns them into new elements of production. It is only as excrements of combined production on a large scale that they become valuable for the productive process as bearers of new exchange-values. These excrements, aside from the services which they perform as new elements of production, reduce the cost of raw material to the extent that they are saleable. For a normal loss is always calculated as a part of the cost of raw material, namely the quantity ordinarily wasted in its consumption. The reduction of the cost of this portion of constant capital increases to that extent the rate of profit, assuming the amount of the variable capital and the rate of surplus-value to be given quantities.

If the surplus-value is given, then the rate of profit can be increased only by a reduction of the value of the constant capital required for the production of commodities. To the extent that the constant capital enters into the production of commodities, it is not its exchange-value, but its use-value, which is taken into consideration. The quantity of labor which the flax can absorb in a spinnery does not depend on its exchange-value, but on its quantity, assuming the degree of productivity of labor, that is to say, the stage of technical development, to be given. In like manner the assistance rendered by a machine to, say, three laborers does not depend on its exchange-value, but on its use-value as a machine. In one stage of technical development a bad machine may be expensive, in another a good machine may be cheap.

The increased profit gathered by a capitalist through the cheapening of such things as cotton, spinning machinery, etc., is the result of a heightened productivity of labor. Of course, this improvement was not introduced in the spinnery, but in the cultivation of cotton and the building of machinery. There it required a smaller expense for the fundamentals of production in order to materialize a certain quantity of labor and secure possession of a certain amount of surplus-labor. This means a reduction of the expense required for the appropriation of a certain quantity of surplus-labor.

We mentioned in the foregoing the savings realized in the

process of production by the co-operative use of the means of production by socially combined laborers. Other economies, resulting in the expenditure of constant capital from the shortening of the time of circulation (a result brought about largely by the development of the means of communication) will be discussed later on. At this point we shall mention the economies due to progressive improvements of machinery, namely 1) of its substance, such as iron for wood; 2) the cheapening of machinery by the improvement of methods of manufacture, so that the value of the fixed portion of constant capital, while continually increasing with the development of labor on a large scale, does not grow at the same rate; [12] 3) the special improvements enabling the existing machinery to work more cheaply and effectively, for instance, improvements of steam boilers, etc., which will be further discussed later on; 4) the reduction of waste through better machinery.

Whatever reduces the wear of machinery, and of the fixed capital in general, for any given period of production, cheapens not only the individual commodity, seeing that every individual commodity reproduces in its price its share of this wear and tear, but reduces also the aliquot portion of the invested capital for this period. Repair work, etc., to the extent that it becomes necessary, is figured in with the original cost of the machinery. A reduction of the expense for repairs, due to a greater durability of the machinery, reduces the price of this machinery correspondingly.

It may be said also of these economies, at least of most of them, that they are possible only through the combination of labor and are often not realized until production is carried forward on a still larger scale, so that they are due to an even greater combination of laborers in the direct process of production.

On the other hand, the development of the productive power of labor in any one line of production, for instance in the production of iron, coal, machinery, buildings, etc., which may be in part connected with improvements on the field of intellectual production, especially in natural science and its

[12] See Ure on the progress in factory construction.

practical application, appears to be the premise for a reduction of the value, and consequently of the cost, of means of production in other lines of industry, for instance in the textile business or in agriculture. This follows naturally from the fact that a commodity, which issues as a product from a certain line of production, enters into another as a means of production. Its dearness or cheapness depends on the productivity of labor in that line of production from which it issues as a product. Thus it is at the same time a basic condition, not only for the cheapening of commodities into whose production it enters as a means of production, but also for the reduction of the value of constant capital, whose element it becomes, and thereby for the increase of the rate of profit.

The characteristic feature of this kind of economies in the constant capital due to the progressive development of industry is that the rise in the rate of profit in one line of industry is the result of the increase of the productive power of labor in another. That which the capitalist appropriates in this case is once more a gain which is the product of social labor, although not a product of the laborers directly exploited by him. Such a development of the productive power is traceable in the last instance to the social nature of the labor engaged in production; to the division of labor in society; to the development of intellectual labor, especially of the natural sciences. The capitalist thus appropriates the advantages of the entire system of the division of social labor. It is the development of the productive power of labor in its exterior department, in that department which supplies it with means of production, which relatively lowers the value of the constant capital employed by the capitalist and consequently raises the rate of profit.

Another raise in the rate of profit is produced, not by economies in the labor creating the constant capital, but by economies in the operation of this capital itself. On one hand, the concentration of laborers, and their co-operation on a large scale, saves constant capital. The same buildings, appliances for fuel and light, etc., cost relatively less for large scale than for small scale production. The same is true of power and

working machinery. Although their absolute value increases, it falls relatively in comparison to the growing extension of production and the magnitude of the variable capital, or to the mass of labor-power set in motion. The economy realized by a certain capital within its own line of production is first and foremost an economy in labor, that is to say, a reduction of the paid labor of its own laborers. The previously mentioned economy is distinguished from this one by the fact that it accomplished the greatest possible appropriation of the unpaid labor in other lines in the most economical way, that is to say, with as little expense as a certain scale of production will permit. To the extent that this economy does not rest on the previously mentioned exploitation of the productivity of the social labor employed in the production of constant capital, or in an economy arising from the operation of the constant capital itself, it is due either directly to the co-operation and social nature of labor within a certain line of production, or to the production of machinery, etc., on a scale in which its value does not grow at the same rate as its use-value.

Two points must be kept in view here: First, if the value of c were zero, then p′ would be equal to s′, and the rate of profit would be at its maximum. In the second place, the most important thing for the direct exploitation of labor is not the exchange-value of the employed means of exploitation, whether they be fixed capital, raw materials or auxiliary substances. In so far as they serve as means to absorb labor, as media in and by which labor and surplus-labor are materialized, the exchange-value of buildings, raw materials, etc., is quite immaterial. That which is ultimately essential is on the one hand the quantity of them technically required for their combination with a certain quantity of living labor, and on the other hand their fitness; in other words, not only the machinery, but also the raw and auxiliary materials must be good. The good quality of the raw material determines in part the rate of profit. Good material leaves less waste. A smaller mass of raw materials is then needed for the absorption of the same quantity of labor. The resistance to be overcome by the working machine is also less. This affects in part even

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the surplus-value and the rate of surplus-value. The laborer consumes more time with bad raw materials than he would with the same quantity of good material. Wages remaining the same, this implies a reduction of the surplus-labor. Furthermore this affects materially the reproduction and accumulation of capital which depend more on the productivity than on the mass of labor employed, as shown in volume I.

The fanatic hankering of the capitalist after economies in means of production is therefore intelligible. That nothing is lost or wasted, that the means of production are consumed only in the manner required by production itself, depends partly on the skill and intelligence of the laborers, partly on the discipline exerted over them by the capitalist. This discipline will become superfluous under a social system in which the laborers work for their own account, as it has already become practically superfluous in piece-work. This fanatic love of the capitalist for profit is expressed, on the other hand, by the adulteration of the elements of production, which is one of the principal means of reducing the value of the constant capital in comparison with the variable capital, and thus of raising the rate of profit. In addition to this, the sale of these elements of production above their value, so far as this value reappears in the product, plays a considerable role in cheating. This practice plays an essential part particularly in German industry, whose maxim seems to be: People will surely appreciate getting first good samples and then inferior goods from us. However, these matters belong in a discussion of competition, and do not further concern us here.

It should be noted that this raising of the rate of profit by means of a depreciation in the value of the constant capital, in other words, by a reduction of its expensiveness, is entirely independent of the fact whether the line of industry, in which this takes place, produces articles of luxury, necessities of life for the individual consumption of laborers, or means of production. This circumstance would be of material importance only in the case that it would be a question of the rate of surplus-value, which depends essentially on the

value of labor-power, and consequently on the value of the customary necessities of the laborer. But in the present case the surplus-value and the rate of surplus-value have been assumed as given. The proportion of the surplus-value to the total capital, which determines the rate of profit, depends under these circumstances exclusively on the value of the constant capital, and in no way on the use-value of the elements of which this capital is composed.

A relative cheapening of the means of production does not, of course, exclude the absolute increase of their aggregate values. For the absolute scope of their application grows extraordinarily with the development of the productive power of labor and the parallel extension of the scale of production. The economies in the use of constant capital, from whatever point of view they may be considered, are the result, either exclusively of the fact that the means of production serve as co-operative materials for the combined laborers, so that the resulting economies appear as products of the social nature of directly productive labor itself; or, in part, of the fact that the productivity of labor is developed in those spheres which supply capital with means of production, and in that case these economies present themselves once more as products of the development of the productive forces of social labor, provided only that the total labor is compared with the total capital, and not simply with the laborers employed by the individual capitalist owning this particular constant capital. The difference in this case is merely that the capitalist takes advantage not only of the productivity of labor in his own establishment, but also of that in other establishments. Nevertheless, the capitalist presumes that the economies of his constant capital are wholly independent of his laborers and have nothing at all to do with them. On the other hand, the capitalist is always well aware that the laborer has something to do with the fact whether the employer buys much or little labor with the same amount of money (for this is the form in which this transaction between the laborer and the capitalist appears in the mind of the latter). The economies realized in the application of constant capital, this method of getting

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certain result out of the means of production with the smallest possible expense, is regarded more than any other power inherent in labor as a peculiar gift of capital and as a method characteristic of the capitalist mode of production.

This conception is so much less surprising as it seems to be borne out by facts. For the conditions of capitalist production conceal the internal connection of things by the utter indifference, alienation, and expropriation practiced against the laborer in the matter of the material means in which his labor must be incorporated.

In the first place, the means of production constituting the constant capital represent only the money of the capitalist (just as the body of the Roman debtor represented the money of his creditor, according to Linguet). The laborer comes in contact with them only in the direct process of production, in which he handles them as use-values of production, as instruments of labor and materials of production. The increase or decrease of the value of these things are matters which affect his relation to the capitalist no more than the fact that he may be working up either copper or iron. Occasionally, however, the capitalist likes to profess a different conception of the matter, as we shall indicate later on. He does so whenever the means of production become dearer and thereby reduce his rate of profit.

In the second place, so far as these means of production in the capitalist process of labor are at the same time means of exploiting labor, the laborer is no more concerned in the relative dearness or cheapness of these means of exploitation than a horse is concerned in the dearness or cheapness of the bit and bridle by which it is steered.

In the third place, we have seen previously that the social nature of labor, the combination of the labor of a certain individual laborer with that of other laborers for a common purpose, stands opposed to that laborer and his comrades as a foreign power, as the property of a stranger which he would not care particularly to save if he were not compelled to economize with it. It is entirely different in the factories owned by the laborers themselves, for instance, in Rochdale.

It requires hardly any special mention, then, that the general interconnection of social labor, so far as it expresses the productivity of labor in one line of industry by a cheapening and improvement of the means of production in another line, and thereby a raising of the rate of profit, affects the laborers as a matter foreign to them and concerning only the capitalists, since they are the ones who buy and own these means of production. The fact that the capitalist buys the product of the laborers of another line of industry with the product of the laborers in his own line, and that he disposes of the product of the laborers of another capitalist by virtue of having appropriated the unpaid products of his own laborers, is mercifully concealed for him by the process of circulation and its attending circumstances.

This state of things is further complicated by the fact that these economies in the employment of constant capital assume the guise of being due to the peculiar nature of the capitalistic mode of production, and to the special function of the capitalist in particular. The thirst for profits and the demands of competition tend toward the greatest possible cheapening of the production of commodities, just as production on a large scale first develops in its capitalistic form.

Capitalist production promotes on the one hand the development of the productive powers of social labor, and on the other it enforces economies in the employment of constant capital.

However, capitalist production does not stop at the alienation and expropriation of the laborer, the bearer of living labor, from his interest in the economical, that is to say, rational and thrifty, use of the material requirements of his labor. In conformity with its contradictory and antagonistic nature, capitalist production proceeds to add to the economies in the use of constant capital, and thus to the means of increasing the rate of profit, a prodigality in the use of the life and health of the laborer himself.

Since the laborer passes the greater portion of his life in the process of production, the conditions of this productive process constitute the greater part of the fundamental conditions of his vital activity, his requirements of life. Econo-

mies in these requirements constitute a method of raising the rate of profit, just as we observed on previous occasions that overwork, the transformation of the laborers into laboring cattle, constitutes a means of self-expanding capital, of speeding up the production of surplus-value. Such economies are: The overcrowding of narrow and unsanitary rooms with laborers, or, in the language of the capitalist, a saving in buildings; a crowding of dangerous machinery into one and the same room without means of protection against this danger; a neglect of precautions in productive processes which are dangerous to health or life, such as mining, etc.; not to mention the absence of all provisions to render the process of production human, agreeable, or even bearable, for the laborer. From the capitalist point of view, such measures would be quite useless and senseless. No matter how economical capitalist production may be in other respects, it is utterly prodigal with human life. And its saving in one direction is offset by a waste in another, owing to the distribution of its products through trade and the competitive method. Capitalism loses on one side for society what it gains on another for the individual capitalist.

Just as capital endeavors to reduce the direct application of living labor to necessary labor, and to abbreviate the labor required for the production of any commodity by the exploitation of the social productiveness of labor and thus to use as little living labor as possible, so it has also the tendency to apply this minimized labor under the most economical conditions, that is to say, to reduce the value of the employed constant capital to its minimum. While the value of commodities is determined by the necessary labor-time contained in them, not by all of the labor-time incorporated in them, it is the capital which gives reality to this determination and at the same time reduces continually the labor-time socially necessary for the production of a certain commodity. The price of that commodity is thereby lowered to its minimum, since every portion of the labor required for its production is reduced to its minimum.

It is necessary to make a distinction in the economies real-

ized in the employment of constant capital. If the mass, and consequently the amount of the value, of the employed capital increases, it means primarily a concentration of more capital in one hand. Now, it is precisely this greater mass in one hand, going hand in hand, as a rule, with an absolute increase but relative decrease of the number of employed laborers, which permits economies in constant capital. From the point of view of the individual capitalist the volume of the necessary investment of capital, especially of its fixed portion, increases. But compared to the mass of the worked-up materials and of the exploited labor the value of the invested capital relatively decreases.

This will now be briefly illustrated by a few examples. We begin at the end, with economies in the conditions of production which are at the same time the living conditions of the laborer.

II. *Economics in the conditions of labor at the expense of the laborers.*

Coal Mines. Neglect of the most indispensable Expenditures.

"Owing to the competition between the proprietors of coal mines, expenses are kept down to the minimum required for overcoming the most palpable physical difficulties; and owing to the competition among the miners, whose numbers generally exceed the demand, they are glad to expose themselves to considerable danger and to the most injurious influences for a wage which is little above that of the day laborers in the neighboring country districts, more especially since mining permits them to utilize their children profitably. This double competition is fully sufficient . . . to effect the operation of a large portion of the mines with the most imperfect drainage and ventilation; very often with badly built shafts, bad piping, incapable machinists, with badly planned and badly constructed galleries and tracks and this causes a destruction of life, limb, and health, the statistics of which would present an appalling picture." (First Report on Children's Employment in Mines and Collieries, etc., April 21, 1829, page 129.)

About 1860, the average of fatal accidents in the English collieries amounted to 15 men per week. According to the report on Coal Mines Accidents (February 6, 1862), the total deaths from accidents during the ten years from 1852–61 amounted to 8,466. But the report itself admits that this number is far too low, because in the first years, when the inspectors had just been installed and their districts were far too large, a great many accidents and deaths were not reported. The very fact that the number of accidents has decreased since the installation of the inspectors, in spite of their insufficient numbers and limited powers, shows the natural tendencies of capitalist production. Still the number of the killed is very large. These sacrifices of human beings are mostly due to the grovelling greed of the mine owners. Very often they had only one shaft dug, so that there was not only no effective ventilation but also no escape if this shaft became clogged.

Looking upon capitalist production in its details, aside from the process of circulation and the excrescences of competition, we find that it is very economical with materialized labor incorporated in commodities. But it is more than any other mode of production prodigal with human lives, with living labor, wasting not only blood and flesh, but also nerves and brains. Indeed, it is only by dint of the most extravagant waste of individual development that human development is safeguarded and advanced in that epoch of history which immediately precedes the conscious reorganisation of society. Since all the economies here mentioned arise from the social nature of labor, it is just this social character of labor which causes this waste of the lives and health of the laborers. The following question suggested by factory inspector B. Baker is characteristic in this respect: "The whole question is one for serious consideration, in what way this sacrifice of infant life occasioned by congregational labor can be averted?" (Report Fact., October 1863, page 157.)

Factories. Under this head belongs the disregard for all precautions for the security, comfort, and health of the laborers, also in the factories. A large portion of the bulletins of casualties enumerating the wounded and slain of the indus-

trial army belong here (see the annual factory reports). Furthermore lack of space, ventilation, etc.

As late as October, 1855, Leonard Horner complained about the resistance of numerous manufacturers against the legal requirements concerning protective appliances on horizontal shafts, although the dangerous character of these shafts was continually proved by accidents, many of them fatal, and although the appliance for protection against this danger was neither expensive nor interfered with the work. (Rep. Fact., October, 1855, page 6.) In their resistance against this and other legal requirements, the manufacturers are ably seconded by the unpaid justices of the peace, who are themselves manufacturers or their friends, and who render their verdicts accordingly. What sort of verdicts those gentlemen rendered was revealed by Superior Judge Campbell, who said with reference to one of them, against which an appeal was made to him: "This is not an interpretation of an act of parliament, it is simply its abolition." (L. c., page 11.) Horner says in the same report that in many factories machinery is started up without warning the laborers. Since there is always something to look after, even when the machinery is at a stand still, there are always many hands and fingers busy on it, and accidents happen continually from the omission of a mere signal. (L. c., page 44.) The manufacturers of that period had formed a union opposing the factory legislation, the so-called "National Association for the Amendment of the Factory Laws" in Manchester, which collected, in March, 1855, more than 50,000 p.st. by an assessment of 2 shillings per horse-power. This sum was to pay for lawsuits of the members of the association against court proceedings instigated by factory inspectors, all cases of this kind being fought by the union. The issue was to prove that killing is no murder when done for profit. The factory inspector for Scotland, Sir John Kincaid, relates of a certain firm in Glasgow that it used the old iron of its factory to make protective appliances for all its machinery, the cost being 9 p.st. 1 shilling. If this firm had joined the manufacturers' union, it would have had to pay an assessment of 11 p.st. on its 110 horse powers. This

would have been more than the cost of all of its protective appliances. But the National Association had been organized in 1854 for the express purpose of opposing the law which prescribed such protection. The manufacturers had paid no attention whatever to this law during all the time from 1844 to 1854. At the instruction of Palmerston the factory inspectors then informed the manufacturers that the law would henceforth be enforced. The manufacturers immediately founded their union. Many of its most prominent members were justices of the peace who were supposed to carry out this law. When the new Minister of the Interior, Sir George Grey, offered a compromise, in April, 1855, to the effect that the government would be content with practically nominal appliances for protection, the Association declined even this, with indignation. In various lawsuits, the famous engineer Thomas Fairbairn permitted the manufacturers to throw the weight of his name into the scale in favor of economies and in defense of the violated liberty of capital. The chief of factory inspectors, Leonard Horner, was persecuted and maligned by the manufacturers in every conceivable manner.

But the manufacturers did not rest until they had obtained a writ of the Queen's Bench, which interpreted the Law of 1844 to the effect that no protective appliances were prescribed for horizontal shafts installed more than seven feet above the ground. And finally they succeeded in 1856 in securing an act of parliament entirely satisfactory to them, by the help of the hypocrite Wilson Patten, one of those pious souls whose ostentatious religion is always ready to do dirty work for the knights of the money-bag. This act practically deprived the laborers of all special protection and referred them to the common courts for the recovery of damages in cases of accident by machinery (which amounted practically to a mockery, on account of the excessive cost of lawsuits). On the other hand, this act made it almost impossible for the manufacturers to lose a lawsuit, by providing in a very nicely worded clause for expert testimony. As a result, the accidents increased rapidly. In the six months from May to October, 1858, Inspector Baker reported an increase of accidents exceeding that

of the preceding six months by 21%. He was of the opinion that 36.7% of these accidents might have been avoided. It is true, that the number of accidents in 1858 and 1859 was considerably below that of 1845 and 1846. It was 29% less, although the number of laborers had increased by 20% in the industries subject to inspection. But what was the reason for this? So far as the moot question was settled in 1865, it was due mainly to the introduction of new machinery which was provided with protective appliances from the start and to which the manufacturer did not object because they required no extra expense. A few laborers had also succeeded in securing heavy damages for their lost arms and having this sentence upheld even by the highest courts. (Rep. Fact., April 30, 1861, page 31, and April, 1862, page 17.)

This may suffice to illustrate the economies in appliances by which life and limb of laborers (also children) are to be protected against dangers arising in the handling and operating of machinery.

Work in Closed Rooms. It is well known to what extent economies of space, and thus of buildings, crowd the laborers into narrow rooms. This is intensified by economies in appliances for ventilation. These two economies, coupled with an increase of the labor time, produce a large increase in the diseases of the respiratory organs, and consequently an increase of mortality. The following illustrations have been taken from the Reports on Public Health, 6th report, 1863. This report was compiled by Dr. John Simon, well-known from our volume I.

Just as the combination of co-operative labor permits the operation of machinery on a large scale, the concentration of means of production, and economies in their employment, so it is the co-operation of large numbers of laborers in closed rooms and under conditions determined by the ease of manufacture, not by the health of the laborer, which is on the one hand the source of increased profits for the capitalist and on the other the cause of the waste of the lives and health of the laborers, unless it is counteracted by a reduction of the hours of labor and by special precautions.

Dr. Simon formulates the following rule and backs it up with abundant statistics: "To the extent that the population of a certain district is made dependent upon co-operative labor in close rooms, to the same extent, other conditions remaining the same, increases the rate of mortality in that district through pulmonary diseases." (Page 23.) The cause of this is bad ventilation. "And there is probably in all England not a single exception from the rule that in every district, which has an important industry carried on in closed rooms, the increased mortality of its laborers suffices to color the mortality statistics of the entire district with a decided excess of pulmonary diseases." (Page 24.)

The mortality statistics of industries carried on in closed rooms, as examined by the Board of Health in 1860 and 1861, show the following facts: The same number of men between the ages of 15 and 55, having a rate of 100 deaths from consumption and other pulmonary diseases in English agricultural districts, has a rate of 163 deaths from consumption in Coventry, 167 in Blackburn and Skipton, 168 in Congleton and Bradford, 171 in Leicester, 182 in Leek, 184 in Macclesfield, 190 in Bolton, 192 in Nottingham, 193 in Rochdale, 198 in Derby, 203 in Salford and Ashton-under Lyne, 218 in Leeds, 220 in Preston, and 263 in Manchester. (Page 24.) The following table gives a still more convincing illustration.

DISTRICT.	MAIN INDUSTRY.	DEATHS FROM PULMONARY DISEASES BETWEEN THE AGES OF 15 AND 25, PER 100,000	
		MEN	WOMEN.
Berkhampstead	Straw plaiting done by women	219	578
Leighton Buzzard	Straw plaiting done by women	309	554
Newport Pagnell	Manufacture of laces by women	301	617
Towcester	Manufacture of laces by women	239	577
Yeovil	Manufacture of gloves, mainly by women	280	409
Leek	Silk-industry, mainly by women	437	856
Congleton	Silk-industry, mainly by women	566	790
Macclesfield	Silk-industry, mainly by women	593	890
Healthy country district	Agriculture	331	333

It shows the deaths from pulmonary diseases separately for both sexes, between the ages of 15 to 25, computed on every 100,000. The districts selected are those in which only the women are employed in the industry carried on in closed rooms, while the men are employed in all possible lines of work.

In the districts with silk-industries, in which the participation of men in factory work is greater, their death-rate is also higher. The death rate from consumption, etc., in both sexes reveals, according to the report, the atrocious sanitary conditions under which a large portion of our silk-industry is carried on." And this is the same silk-industry whose manufacturers, boasting of the exceptionally favorable and sanitary conditions in their establishments, demanded an exceptionally long labor-time for children under 13 years of age, and were granted permission in several instances. (Volume I, chapter X, 6.)

"None of the hitherto investigated industries will have presented a worse picture than that given by Dr. Smith of tailoring. The work rooms, he says, differ considerably in the matter of sanitation; but nearly all of them are overcrowded, badly ventilated, and to a high degree injurious to health. . . . Such rooms are necessarily hot, as it is; but if the gas is lighted, for instance during a fog in the daytime, or in winter in the evening, the heat rises to 80 or even 90 degrees Fahrenheit (27 to 33 degrees C.) and causes a dripping perspiration and a precipitation of vapor on the glass panes, so that water is continually trickling down or dropping down from the skylight, and the laborers are compelled to keep some windows open, although they inevitably catch cold thereby.— He gives the following description of 16 of the most important shops of the West end of London: The largest cubic space alloted in these badly ventilated rooms to one laborer is 270 cubic feet; the smallest is 105 feet, the average being 156 feet per man. In a certain shop, which has a gallery running all around its sides and which receives light only from above, from 92 to 100 people are employed and a large number of gas jets lighted; the toilets are next door, and the

room does not give above 150 cubic feet to each man. In another shop, which can be called only a dog kennel in a yard lighted from above and which can be ventilated only by one small window in the roof, from 5 to 6 people work in a room of 112 cubic feet per man." And "in these atrocious work rooms, described by Dr. Smith, the tailors work generally from 12 to 13 hours per day, and at certain periods work is continued for 14 to 16 hours." (Pages 25, 26, 28.)

NUMBER OF PEOPLE EMPLOYED.	LINES OF INDUSTRY AND LOCALITY.	RATE OF MORTALITY PER 100,000 BETWEEN THE AGES OF		
		25-35	35-45	45-55
958,265	Agriculture, England and Wales	743	805	1195
22,301 men and 12,377 women	Tailoring, London	958	1262	2093
13,803	Typesetters and Printers, London	894	1747	2367

(Page 30.) It must be noted, and has in fact been noted by John Simon, the chief of the Medical Department, who issued the report, that the mortality of the tailors, typesetters, and printers of London, for the ages of 25 to 35 years, has been reported too low, because the London employers in both lines have a large number of young people (probably up to 30 years of age) from the country engaged as apprentices and "improvers," that is to say, men who are being trained. These increase the number of employed on which the death-rates of London are computed. But they do not contribute at the same rate to the number of deaths in London, because their stay there is only temporary. If they get sick during this period, they return to their homes in the country to get well, and if they die there, they are registered in their own district. This fact affects the earlier ages still more and renders the death-rate figures of London for these ages completely valueless as standards of industrial violations of sanitary laws. (Page 30.)

The case of the typesetters is similar to that of the tailors. In addition to lack of ventilation, poisoned air, etc., their condition is aggravated by night-work. Their regular working time lasts from 12 to 13 hours, sometimes from 15 to 16.

"Great heat and suffocating air as soon as the gas is lighted. . . . It is not a rare occurrence that the fumes of a foundry, or the smell of machinery or of cesspools, rise from lower floors and aggravate the evils of the upper floors. The hot air of the lower rooms heats the upper ones by warming the floors, and if the rooms are low and much gas is burned in them, it is a great nuisance. It is still worse in places where steam engines are installed in the lower rooms and fill the whole house with undesirable heat. . . . In general it may be said that the ventilation is defective throughout and totally insufficient to remove the heat and the products of combustion of the gas after sundown, and that conditions in many shops, especially if they were formerly living rooms, are most deplorable." In some shops, particularly for weekly papers, where boys of 12 to 16 years are also employed, work is carried on almost uninterruptedly for two days and one night; while in other printing shops, which make a specialty of job work, the laborer does not get a rest even on Sunday so that his days of work are 7 instead of 6 per week. (Page 26, 28.)

The milliners and dress makers occupied our attention also in volume I, chapter X, 3, so far as overwork was concerned. Their work rooms are described in the present report by Dr. Ord. Even if they are better during the day, they become overheated, foul, and unhealthy during the hours in which gas is burned. Dr. Ord found in 34 shops of the better sort that the average number of cubic feet per worker was as follows: "In four cases more than 500; in four other cases 400–500; in five cases 200–250; in four cases 150–200; and finally in nine cases only 100–150. Even the most favorable of these cases barely suffices for continued work, when the room is not perfectly ventilated. . . . Even with good ventilation the workshops become very hot and stuffy after dark on account of the many gas jets needed." And here follows a remark of Dr. Ord concerning one of the minor workshops operated for the account of a middleman: "One room, containing 1,280 cubic feet; persons present, 14; space for every person, 91.5 cubic feet. The girls looked haggard and neglected. There wages were said to be from 7 to 15 sh. per week, aside from

tea. . . . The hours of labor from 8 A. M. to 8 P. M. The small room, in which these 14 persons were crowded together, was badly ventilated. There were two movable windows and a fireplace, which was, however, closed. There were no special appliances of any kind for ventilation." (Page 27).

The same report states with reference to the overwork of the milliners and dress makers: "The overworking of young women in fashionable millinery stores prevails only for about 4 months in that monstrous degree which has elicited on many occasions the momentary surprise and indignation of the public. But during these months work is as a rule continued in the shop for fully 14 hours per day, and on accumulated rush-orders for days from 17 to 18 hours." In other seasons work in the shop is carried on probably for 10 to 11 hours; those working at home are regularly engaged for 12 to 13 hours. In the making of ladies' cloaks, capes, shirts, etc., including work with a sewing machine, the hours passed in the common work room are fewer, generally not more than 10 to 12, but, says Dr. Ord, "the regular hours of labor in certain houses, at various times, are subject to considerable extension by means of extra paid overtime, and in others work is taken home in order to be finished after the regular working time. We may add that either one of these methods of over-work is often compulsory." (Page 28). John Simons remarks in a footnote to this page: "Mr. Redcliffe, the secretary of the Epidemiological Society, who had especially frequent opportunities to examine the health of milliners and dressmakers of the first firms, found among 20 girls who said of themselves that they were "quite well" only one in good health; the others showed different degrees of physical exhaustion, nervous debility, and numerous functional troubles arising therefrom. He names as causes, in the first instance, the length of the working hours, which he estimates at a minimum of 12 hours per day even in the dull season, and secondly, 'overcrowding and bad ventilation of workrooms, air poisoned by gas lights, insufficient or bad food, and lack of provision for domestic comfort.'"

The conclusion at which the chief of the English Board of Health arrived, is that "it is practically impossible for laborers to insist on that which is theoretically their first sanitary right: the right of having their common labor freed from all needless conditions injurious to health, so far as may lie in the power of their employer, and at his expense, whatever may be the work to be accomplished by them for their employer. And while the laborers themselves are actually not in a position to enforce this sanitary justice, neither can they expect any effective assistance from the officials responsible for the enforcement of the Nuisance Removal Acts, in spite of the presumable intention of the legislator." (Page 29.) — "There will no doubt be some small technical difficulties in the way of determining the lowest limit where the employers shall be subject to regulation. But . . . in principle the claim to the protection of health is universal. And in the interest of myriads of working men and working women, whose lives are needlessly stunted and shortened by the infinite physical ills caused by their occupations, I venture to express the hope that the sanitary conditions of labor will just as universally be placed under fitting legal protection; at least sufficiently to safeguard an effective ventilation of all closed work rooms, and to restrict as much as possible the particular unsanitary influences naturally inherent in every dangerous line of industry." (Page 63.)

III. *Economies in the Generation of Power, Transmission of Power, and Buildings.*

In his report for October, 1852, L. Horner quotes a letter of the famous engineer James Nasmyth of Patricrofit, the inventor of the steam hammer, which contains substantially the following statements.

The public is little acquainted with the immense increase of motive power obtained through such changes of system and improvements (of steam engines) as he is mentioning. The machine power of the district of Lancashire was for almost forty years under the pressure of timid and prejudiced traditions. But now the engineers have been happily emancipated.

During the last 15 years, but particularly in the course of the last 4 years (since 1848) a few important changes have taken place in the operation of condense steam engines. The result was that the same machines accomplished far more work, and that the consumption of coal was considerably decreased at the same time. For many years, since the introduction of steam power in the factories of this district, the velocity which was considered safe for condense steam engines, was about 220 feet of piston lift per minute, that is to say, a machine with a piston lift of 5 feet was limited by regulation to 22 revolutions of the shaft. It was not considered appropriate to drive the machine faster. And since the entire installation was adapted to this velocity of 220 feet of piston lift per minute, this slow and senselessly restricted motion prevailed in the factories for many years. But finally, either through a lucky unfamiliarity with this regulation, or for better reasons of some daring innovator, a greater velocity was tried, and, since the result was very favorable, this example was followed by others. The machine was given full rein, as the saying was, and the main wheels of the transmission gear were changed in such a way that the steam engine could make 300 feet per minute and more, while the machinery was kept at its former speed. This acceleration of the steam engine had become general, because it had been demonstrated that more available power was gained from the same machine, and that the movements were much more regular on account of the greater impetus of the driving wheel. The same steam pressure and the same vacuum in the condenser produced more power by means of a simple acceleration of the piston lift. For instance, if by appropriate changes we can accomplish that a machine yielding 40 horse power with 200 feet per minute makes 400 feet with the same steam pressure and vacuum, we shall secure exactly double that power, and since the steam pressure and the vacuum are the same in both cases, the strain on the various individual parts of the machine, and thus the danger of accidents, will not materially increase with an increase of speed. The whole difference is that we consume more steam in comparison to the accelerated movement of the piston, or at least

approximately so; and furthermore, there is a somewhat more rapid wear of the bearings, or friction parts, but this is hardly worth mentioning. But in order to obtain more power with the same machine by speeding up the piston, more coal must be burned under the same steam boiler, or a boiler of a larger volume of evaporation must be employed, in short, more steam must be generated. This was accomplished, and boilers with a greater volume were installed with the old "accelerated" machines. These accomplished consequently as much as 100% more work. About 1842, the extraordinarily cheap generation of power with steam engines in the mines of Cornwall began to attract attention. The competition in cotton spinning compelled the manufacturers to seek the main source of their profits in economies. The remarkable difference in the consumption of coal per hour and horse-power shown by the Cornish machines, and likewise the extraordinarily economical performances of the Woolf Double Cylinder Machines, brought the question of fuel into the foreground, also in Nasmyth's district. The Cornish and the double cylinder machines furnished one horse-power per hour for every 3½ or 4 pounds of coal, while the machines in the cotton districts generally consumed 8 or 12 pounds per horse-power an hour. Such a marked difference induced the manufacturers and machine builders of Nasmyth's district to accomplish by similar means just such extraordinary economies as were then the rule in Cornwall and France, where the high prices of coal had compelled the manufacturers to restrict this expensive branch of their business as much as possible. This led to some very important results. In the first place, many boilers, one-half of whose surface remained exposed to the cold outer air in the time of high profits, were then covered with thick layers of felt, or bricks and mortar, and other material, by which the radiation of the heat, which had been generated at such high cost, was prevented. Steam pipes were protected in the same way, and the cylinders were also surrounded by felt and wood. In the second place, high pressure came into use. Hitherto the safety-valve had been weighted only so slightly that it opened at 4, 6, or 8 pounds of steam pressure per square inch.

Then it was discovered that considerable coal could be saved by raising the pressure to 14 or 20 pounds. In other words, the work of a factory was accomplished by a considerably lower consumption of coal. Those who had the means and the enterprise carried the system of increased pressure to its full extension and employed judiciously constructed steam-boilers, which furnished steam at a pressure of 30, 40, 60, or 70 pounds per square inch, which would have scared an engineer of the old school to death. But as the economic result of this increased steam-pressure soon made itself felt in the unmistakable form of so many pounds sterling, shillings, and pence, the high pressure boilers for condensing machines became very common. Those who carried out the reform radically used the Woolf machines, and this took place in most of the recently built machines. These were the Woolf machines with two cylinders, in one of which the steam from the boiler furnishes power by means of the excess of pressure over that of the atmosphere, whereupon, instead of escaping as formerly after each stroke of the piston into the open air, it passes into a low pressure cylinder of about four times the volume of the other and, after accomplishing there some more expansion, goes to the condenser. The economic result obtained by such a machine is the performance of one horse-power per hour for every 3½ or 4 pounds of coal, while the machines of the old style required from 12 to 14 pounds for this purpose. A clever device permitted the adaption of the Woolf system with double cylinders, that is to say, the high and low pressure machine, to already existing machines and thus the increase of their performance and at the same time a reduction in the consumption of coal. The same result was obtained during the last 8 or 10 years by a combination of a high pressure machine with a condensing machine in such a way that the steam used in the former passed into the latter and drove it. This system is useful for many purposes. It would not be easily possible to obtain any accurate statistics of the increased performances of the same identical steam-engines supplied with some or all of these new improvements. But it is certain that the same weight of steam machinery now

performs 50% more service on an average, and that in many cases the same steam-engine, which yielded 50 horse-powers at the time of the limited speed of 220 feet per minute, yields now more than 100 horse-powers. The highly economical results of the employment of high pressure steam in condensing machines, and the far greater demands made upon the old machines for the purposes of business expansion, have led in the last three years to the introduction of pipe boilers, by which the cost of steam generation is again considerably reduced. (Rep. Fact., Oct., 1852, pages 23 to 27.)

What applies to power generating, also applies to power transmitting and working machinery. According to Redgrave's report, on page 58 of the above-cited document, the rapid steps made in the development of improvements in machinery during the last years have enabled the manufacturers to expand production without additional motive power. The more economical employment of labor has become necessary through the shortening of the working day, and in most well-managed factories means are always considered by which production may be increased, and expenses decreased. Redgrave has before him a calculation, which he owes to the courtesy of a very intelligent gentleman in his district, referring to the number and age of the laborers employed in his factory, the machines operated in it, and the wages paid from 1840 to date. In October, 1840, his firm employed 600 laborers, of whom 200 were less than 13 years old. In October, 1852, they employed only 350 laborers, of whom only 60 were less than 13 years old. The same number of machines, with very few exceptions, were in operation, and the same amounts were paid in wages, in both years. . . .

These improvements of machinery do not show their full effects until they are used in new and judiciously built factories.

According to the testimony of a cotton spinner in the factory reports for 1863, page 110, great progress has been made in the building of factories in which such improved machinery is to be installed. In the basement of his factory he twines all his yarn, and for this purpose alone he installs 29,000

doubling spindles. In this room and in the shed alone he saves at least 10% in labor. This is not so much the result of improvements in the doubling system, as of the concentration of machinery under one gearing. He can drive the same number of spindles with one single driving shaft, and thus he saves from 60 to 80% for gearing as compared to other firms. This furthermore results in a great saving of oil, grease, etc. In short, with perfected installations in his factory and improved machinery he had saved at least 10% in labor, not to mention great economies in power, coal, oil, grease, transmission belts and shafts.

IV. *Utilisation of the Excrements of Production.*

With the advance of capitalist production the utilisation of the excrements of production and consumption is extended. We mean by the former the refuse of industry and agriculture, and by the latter either the excrements, such as issue from the natural circulation of matter in the human body, or the form in which objects of consumption are left after being used. Excrements of production, for instance in chemical industries, are such by-products as are wasted in production on a smaller scale; iron filings collected in the manufacture of machinery and carried back into the production of iron as raw material, etc. Excrements of consumption are the natural discharges of human beings, remains of clothing in the form of rags, etc. The excrements of consumption have the most value for agriculture. So far as their utilisation is concerned, the capitalist mode of production wastes them in enormous quantities. In London, for instance, they find no better use for the excrements of four and a half million human beings than to contaminate the Thames with it at heavy expense.

The raising of the price of raw materials naturally leads to the utilisation of waste products.

The general requirements for the re-employment of these excrements are: A great quantity of such excrements, such as is only the result of production on a large scale; improvements in machinery by which substances formerly useless in

their prevailing form are given another useful in reproduction; progress of science, especially of chemistry, which discovers the useful qualities of such waste. It is true, that great economies of this sort are also observed in small agriculture carried on like gardening, for instance in Lombardy, southern China, and Japan. But on the whole the productivity of agriculture under this system is obtained by great prodigality in human labor-power, which is drawn from other spheres of production.

The so-called waste plays an important role in almost every industry. The factory report for December, 1863, mentions as one of the principal reasons why farmers in many parts of England and Ireland do not like to grow flax, or do so but rarely, the great waste occurring in the preparation of flax by small scutch-mills driven by water. The waste is relatively small in cotton, but very considerable in flax. Good treatment in soaking and mechanical scutching may reduce this disadvantage considerably. In Ireland flax is frequently scutched in a very slovenly manner, so that from 28 to 30% are lost. All this might be avoided by the use of better machinery. So much tow fell by the side in the preparation of flax that the factory inspector reports having heard it said of some of the scutching mills in Ireland that the laborers carry the waste home and burn it in their fire-places, although it is very valuable. (Page 140 of the above report.) We shall speak of cotton later, in discussing the fluctuations of prices of raw materials.

The wool industry was carried on more intelligently than the preparation of flax. The same report states on page 107 that it was formerly the custom to veto the preparation of waste wool and woolen rags for renewed use, but this prejudice has been entirely dropped so far as the shoddy trade is concerned, which has become an important branch of the wool district of Yorkshire. It is doubtless expected that the trade with cotton waste will soon occupy the same rank as a line of business meeting a long felt want. Thirty years previous to 1863, woolen rags, that is to say pieces of all-wool cloth, etc., were worth on an average about 4 p.st. 4 sh. per ton. But

a few years before 1863 they had become worth as much as 44 p.st. per ton. And the demand for them had risen to such an extent that mixed stuffs of wool and cotton were also used, means having been found to destroy the cotton without injuring the wool. And thousands of laborers were employed in 1863 in the manufacture of shoddy, and the consumer benefited thereby, being enabled to buy cloth of good quality at very reasonable prices. The shoddy so rejuvenated constituted in 1862 as much as one-third of the entire consumption of wool in English industry, according to the factory report of October, 1862, page 81. The truth about the "benefit" for the "consumer" is that his shoddy clothes wear out in one-third of the time which good woolen clothes used to last, and become threadbare in one-sixth of this time.

The English silk industry moved on the same inclined plane. From 1839 to 1862 the consumption of genuine raw silk had somewhat decreased, while that of silk waste had doubled. By the help of improved machinery it was possible to make this otherwise rather worthless stuff into a silk useful for many purposes.

The most striking instance of the utilisation of waste was furnished by the chemical industry. It utilises not only its own waste in new ways, but also that of many other industries. For instance it converts the formerly almost useless gas-tar into aniline colors, alizarin, and more recently even into drugs.

This economy through the re-employment of excrements of production must be distinguished from economies through the prevention of waste, that is to say, the reduction of excrements of production to a minimum and the maximum utilisation at first hand of all raw and auxiliary materials required in production.

The reduction of waste depends in part on the quality of the machinery in use. Oil, soap, etc., are saved to the extent that the parts of a machine are constructed accurately and polished. This refers to auxiliary materials. In part, however, and this is the most important part, it depends on the quality of the employed machines and tools whether a large or

small portion of raw material is converted into waste in the process of production. Finally it depends on the quality of the raw material itself. This in turn is conditioned on the development of the extract industry and agriculture producing the raw material (the progress of civilisation strictly so called), and on the improvement of processes through which the raw materials pass before their entry into manufacture.

"Parmentier proved that the art of grinding grain was very materially improved in France in recent times, for instance since the time of Louis XIV, so that the new mills, compared to the old, can make as high as twice as much bread from the same amount of grain. In fact, the annual consumption of an inhabitant of Paris was at first placed at 4 *setiers* of grain, then at 3, finally at 2, while nowadays it is only 1½ *setier,* or about 342 lbs. per capita. . . . In the Perche, in which I lived for a long time, the crude mills of granite and trap rock have been rebuilt according to the rules of advanced mechanics as understood for the last 30 years. They have been provided with good mill stones from La Ferté, the grain has been ground twice, the milling sack has been given a circular motion, and the output of flour has increased by one-sixth for the same amount of grain. I can easily explain the enormous discrepancy between the daily consumption of grain among the Romans and among us. It is due simply to the imperfect method of milling and bread making. In this connection I must explain a peculiar fact mentioned by Pliny, XVIII, c. 20, 2: . . . 'The flour was sold in Rome, according to quality, at 40, 48, or 96 as per modius.' These prices, so high in proportion to the contemporaneous prices of grain, are due to the imperfect state of the mills of that period, and the resulting heavy cost of milling." (Dureau de la Malle, *Economie Politique des Romains.* Paris, 1840, I, page 280.)

V. *Economies Due to Inventions.*

These economies in the utilisation of fixed capital, we repeat, are due to the application of the requirements of labor

on a large scale, in short, are due to the fact that these requirements serve as the first conditions of direct co-operative and social production, a co-operation within the primary process of production. On the one hand, this is the indispensable requirement for the application of mechanical and chemical inventions without increasing the price of commodities, and this is always the first consideration. On the other hand, only production on a large scale permits those economies which are derived from co-operative productive consumption. Finally, it is only the experience of combined laborers which discovers the where and how of economies, the simplest methods of applying the experience gained, the way to overcome practical frictions in carrying out theories, etc.

Incidentally it should be noted that there is a difference between universal labor and co-operative labor. Both kinds play their role in the process of production, both flow one into the other, but both are also differentiated. Universal labor is scientific labor, such as discoveries and inventions. This labor is conditioned on the co-operation of living fellow-beings and on the labors of those who have gone before. Co-operative labor, on the other hand, is a direct co-operation of living individuals.

The foregoing is corroborated by frequent observation, to-wit:

1) The great difference in the cost of the first building of a new machine and that of its reproduction, on which see Ure and Babbage.

2) The far greater cost of operating an establishment based on a new invention as compared to later establishments arising out of the ruins of the first one, as it were. This is carried to such an extent that the first leaders in a new enterprise are generally bankrupted, and only those who later buy the buildings, machinery, etc., cheaper, make money out of it. It is, therefore, generally the most worthless and miserable sort of money-capitalists who draw the greatest benefits out of the universal labor of the human mind and its co-operative application in society.

CHAPTER VI.

THE EFFECT OF FLUCTUATIONS IN PRICE.

I. *Fluctuations in the Price of Raw Materials, and their Direct Effects on the Rate of Profit.*

THE assumption in this case, as in previous ones, is that no change takes place in the rate of surplus-value. This assumption is necessary in order that this case may be analysed in its pure state. However, it would be possible that a certain capital, whose rate of surplus-value remains unchanged, might employ an increasing or decreasing number of laborers, in consequence of contraction or expansion caused by fluctuations in the price of raw materials such as we are about to analyse here. In that case, the mass of surplus-value might vary, while the rate of surplus-value remained the same. Still, it will be convenient to set aside also such a case as a side-issue. If improvements of machinery and changes in the price of raw materials simultaneously influence either the number of laborers employed by a certain capital, or the level of wages, one has but to tabulate 1) the effect caused by the variations of constant capital in the rate of profit, and 2) the effect caused by variations in wages on the rate of profit. The result then becomes apparent of itself.

But in general, it should be noted here, as in previous cases: If variations take place, either in consequence of economies in the constant capital, or in consequence of fluctuations in the price of raw materials, they always affect the rate of profit, even though they may leave the wages, and therefore the mass and rate of surplus-value, untouched. They change the magnitude of the C in $s' \frac{v}{C}$, and thus the value of the whole fraction. It is therefore immaterial, in this case, in contradistinction to what we found to be the case in our analysis of surplus-value, in which sphere of production these variations

take place, whether the lines of production affected by them produce articles of food for laborers, or constant capital for the production of such articles, or not. The deductions made here apply just as well if these variations occur in the production of articles of luxury, and by the production of articles of luxury I mean all production not serving for the reproduction of labor-power.

In the raw materials we include here also the auxiliary substances, such as indigo, coal, gas, etc. Furthermore, so far as machinery falls under this head, its own substance consists of iron, wood, leather, etc. Its own price is therefore affected by fluctuations in the prices of raw materials used in its construction. To the extent that its price is raised through fluctuations, either in the price of the raw materials of which it consists, or of the auxiliary substances consumed in its operation, the rate of profit is lowered. And vice versa.

In the following analysis it will be necessary to confine ourselves to fluctuations in the price of raw materials, not so far as they go to make up the raw materials of machinery serving as means of production, or as raw materials in auxiliary substances applied in the operation of machinery, but in so far as they are raw materials contributing to the process in which commodities are produced. We make only this remark: The wealth of nature in iron, coal, wood, etc., which are the principal elements used in the construction and operation of machinery, presents itself here as a natural fertility of capital and becomes an element in determining the rate of profit, independently of the highness or lowness of wages.

Since the rate of profit is represented by $\frac{s}{C}$, or $\frac{s}{c+v}$, it is evident that everything which causes a variation of the magnitude of c, and thereby of C, must also bring about a variation in the rate of profit, even if s and v, and their mutual proportions, remain unaltered. Now, raw materials constitute one of the principal portions of constant capital. Even in industries which consume no raw material, in the strict meaning, it enters as auxiliary material, or as a component part of machinery, etc., and fluctuations in its price influence to that extent the rate of profit. If the price of raw material

falls by the amount d, then $\frac{s}{C}$, or $\frac{s}{c+v}$, become $\frac{s}{C-d}$, or $\frac{s}{(c-d)+v}$, in other words, the rate of profit rises. On the other hand, if the price of raw material rises, then $\frac{s}{C}$, or $\frac{s}{c+v}$, become $\frac{s}{C+d}$, or $\frac{s}{(c+d)+v}$, in other words, the rate of profit falls. Other circumstances remaining unchanged, the rate of profit falls and rises, therefore, inversely as the price of raw material. This shows, among other things, how important the low price of raw material is for industrial countries, even if fluctuations in the price of raw materials were not accompanied by variations in the selling sphere of the product, that is to say, quite aside from the relation of demand to supply. It follows furthermore that foreign trade influences the rate of profit, even aside from its influence on wages through the cheapening of the necessities of life, for it affects the prices of raw or auxiliary materials consumed in industry or agriculture. It is due to the imperfect understanding of the nature of the rate of profit and its specific difference from the rate of surplus-value that economists (like Torrens) give a wrong explanation of the marked influence of the prices of raw material on the rate of profit, as demonstrated by experience, and that on the other hand economists like Ricardo, who cling to general principles, misapprehend the influence of such factors as the world's trade on the rate of profit.

We may realise, then, the great importance of the abolition or reduction of tariffs on raw materials for industry. Already the first rational development of the protective system made the utmost reduction of import duties on raw materials one of its cardinal principles. This, and the abolition of the duty on corn, was the main object of the English free traders, who took also, above all, care to have the duty on cotton abolished.

The use of flour in the cotton industry may serve as an illustration of the importance of a reduction in the price of an article, which, although not strictly raw material, is an auxiliary and, of course, at the same time one of the principal elements of food. As long ago as 1837, R. H. Greg [13]

[13] The Factory Question and the Ten Hours Bill. By R. H. Greg. London, 1837. page 115.

calculated that the 100,000 power looms and 250,000 hand looms then operated in the cotton mills of Great Britain consumed 41 million lbs. of flour in the smoothing of chains. To this was added a third of this quantity for bleaching and other processes. The total value of the flour so consumed was placed by him at 342,000 p.st. per year for the preceding ten years. A comparison with the prices of flour on the continent showed that the raise in the price of flour forced upon the manufacturers by the corn-laws amounted alone to 170,000 p.st. per year. For 1837, Greg estimated it at a minimum of 200,000 p.st., and he mentions the fact that one firm had to pay 1,000 p.st. more per year for flour. In consequence of this "Large manufacturers, careful and calculated business men, declared that 10 hours of labor per day would be enough, if the corn-laws were repealed." (Rep. Fact., Oct., 1848, page 98.) The corn-laws were repealed. Also the duties on cotton and other raw materials. But no sooner had this been accomplished than the opposition of the manufacturers to the Ten Hours Bill became more violent than ever. And when the ten hour day in factories nevertheless became a law soon after, the first result was an attempt to reduce wages all around.

The value of the raw materials and auxiliary substances passes entirely, and all at one time, into the value of the product in whose creation they are consumed, while the elements of fixed capital transfer their value only gradually to the product in proportion as they are worn away. It follows that the price of the product is influenced to a far higher degree by the price of raw materials than by that of fixed capital, although the rate of profit is determined by the total value of the capital, regardless of how much of this capital is consumed in the product. But it is evident—although we mention this merely incidentally, since we are still assuming that commodities are sold at their values, so that fluctuations of price caused by competition do not concern us here—that the expansion or restriction of the market depends on the price of the individual commodity and is inversely proportioned to the rise or fall of this price. For this reason we note in reality

that a rise in the price of raw material is not accompanied by a corresponding rise of the price of the product, nor a fall in the price of the raw material by a corresponding fall of that of the product. Consequently the rate of profit falls lower in one case, and rises higher in the other, than it would if products were sold at their value.

Furthermore, the mass and value of the employed machinery grows with the development of the productivity of labor, but not in the same proportion as this productivity, in other words, not in the same proportion as the machine increases its output. Those lines of industry, which consume raw materials, so that the objects on which they expend their labor are themselves products of previous labor, express the growing productivity of labor precisely by the proportion in which a certain increased portion of raw material absorbs a definite quantity of labor. In other words, this increasing productivity is measured by the increasing amount of raw material converted into products, worked up into commodities, for instance, in one hour. To the extent, then, that the productivity of labor is developed, the value of raw material forms an ever growing component of the value of the product in commodities, not only because it passes wholly into them, but also because every aliquot part of the aggregate product contains an ever decreasing share of that portion which represents the wear of machinery and that other which represents newly added labor. In consequence of this falling tendency the other portion of value which represents raw material increases correspondingly, unless this growth is counterbalanced by a proportionate decrease in the value of the raw material due to a growing productivity of the labor required for its production.

Again, we know that the raw materials and auxiliary substances, the same as wages, form parts of the circulating capital and must be continually reproduced in their entirety through the sale of the product, while the machinery is renewed only to the extent that it wears out, a reserve fund being accumulated for that purpose. And it is not so essential that each individual sale should contribute its share to this reserve fund, so long as the total annual sales contribute their

annual share. We see, then, once more that a rise in the price of raw material can curtail or clog the entire process of reproduction, since the price realised by the sale of the commodities may not suffice to reproduce all the elements of these commodities. Or, it may render a continuation of the process on a scale fitting for its technical basis impossible, so that either a portion of the machinery remains idle, or the whole machinery works only a part of the usual time.

Finally, the expense due to waste varies in direct proportion to the fluctuations in the price of raw material, rises and falls with them. Of course, there is a limit also in this case. In 1850 it was still reported, in the factory reports for April, 1850, page 17, that one source of considerable losses through the raising of the price of raw material would hardly be noticed by any one who is not a practical spinner, namely losses through waste. The reporting inspector had been informed that a rise in the price of cotton implied a greater rise in the expenses of the spinner than is indicated by the difference in price. The waste in the spinning of coarse yarns amounts to fully 15%. If this percentage causes a loss of $\frac{1}{2}$ d. per lb. when cotton is worth $3\frac{1}{2}$ d., then the loss increases to 1 d. per lb. as soon as cotton rises to 7 d. per lb. But when, as a result of the American Civil War, cotton rose to a height not equalled in almost a century, the report read differently. We learn from the factory reports of October, 1863, page 106, that the price then paid for cotton waste, and the return of the waste to the factory as raw material, offered some compensation for the difference in the loss through waste between Indian and American cotton. This difference amounted to $12\frac{1}{2}$%. The loss in working up Indian cotton is 25%, so that really this cotton costs the spinner one-fourth more than he paid for it. The loss through waste was not so important while American cotton was quoted at 5 or 6 d. per lb., for it did not exceed $\frac{3}{4}$ d. per lb. But it became a matter for serious consideration, when cotton cost 2 sh. per lb. and the loss through waste amounted to 6d.[14]

[14] The report makes a mistake in the last sentence. Instead of 6d. for loss, through waste, only 3d. should be allowed. This loss amounts indeed to 25% with

II. *Appreciation, Depreciation, Release, and Tie-up of Capital.*

The phenomena analysed in this chapter require for their full development the credit-system and competition on the world-market, the latter being the basis and vital element of capitalist production. These more concrete forms of capitalist production can be comprehensively presented only after the general nature of capital is understood. Moreover, such a presentation lies outside of the scope of this work and belongs in its eventual continuation. Nevertheless, the phenomena mentioned in the title of this chapter may be discussed at this stage in a general way. They are interrelated among themselves, and at the same time touch upon the rate and mass of profits. They are entitled to consideration right here for the further reason that they create the impression that not only the rate, but also the mass of profit — which is actually identical with the mass of surplus-value — could increase or decrease independently of the movements of surplus-value, whether it be its mass or its rate.

Are we to consider the release and tie-up of capital on one side, its appreciation or depreciation on the other, as different phenomena?

The question is first: What do we mean by the release and tie-up of capital? Appreciation and depreciation explain themselves. They do not signify anything but that a certain given capital grows or declines in value as a result of general economic conditions of some sort, for we do not discuss any particular fate of some individual capital. They indicate, in short, that the value of the capital invested in production rises or falls, aside from the question of its self-expansion by means of the surplus-labor employed by it.

By the tie-up of capital we mean that a certain portion of the total value of the product must be reconverted into the elements of constant and variable capital, if production is to

Indian, but only to 12½ to 15% with American cotton, and this last kind is meant, the same percentage being correctly stated for the price of 5 to 6d. It is true, however, that the percentage of waste increased at times considerably, for American cotton brought to Europe during the closing years of the Civil War.— F. E.

proceed on the same scale. By the release of capital we mean that a portion of that part of the total value of the product which had to be reconverted into constant or variable capital up to a certain time becomes disposable and superfluous, provided production is to continue on the same scale. This release or tie-up of capital is different from the release or tie-up of revenue. If the annual surplus-value of a certain capital C is equal to x, then a reduction in the price of commodities consumed by the capitalists would suffice to procure the same enjoyments as before by means of x — a. In other words, a portion of the revenue equal to a is released, and may serve either for the extension of consumption or the reconversion into capital (for the purpose of accumulation). Vice versa, if x + a is needed in order to continue the same scale of living, then this scale must either be reduced or a portion of revenue equal to a and previously accumulated must be drawn upon as revenue.

The appreciation or depreciation may strike either the constant, or the variable capital, or both. In the case of the constant capital it may affect either the fixed, or the circulating portion, or both.

In the case of the constant capital we have to consider the raw materials and auxiliary substances, including half-wrought articles, all of which we comprise here under the term raw materials, furthermore, machinery and other fixed capital.

We referred in the preceding analysis especially to variations in the price, or the value, of raw materials, and to their influence on the rate of profit. And we announced the general law that, other circumstances remaining the same, the rate of profit is inversely proportioned to the value of the raw materials. This is unconditionally true of a capital newly invested in any business enterprise, where the investment of capital, that is to say the conversion of money into productive capital, is just taking place.

But aside from this capital in process of new investment, a large portion of the already functioning capital is engaged in the sphere of circulation, while another portion is busy in the sphere of production. One portion exists on the market

in the shape of commodities waiting to be converted into money; another exists in the shape of money of some kind waiting to be reconverted into elements of production, finally, a third portion exists in the sphere of production, either in the primitive form of means of production (raw materials, auxiliary substances, half-wrought articles purchased on the market, machinery and other fixed capital), or as products in process of manufacture. The effect of appreciation or depreciation of any of these depends in a large measure on the relative proportions of these things. Let us leave aside, for the sake of simplicity, all fixed capital, and let us consider only that portion of constant capital which consists of raw materials, auxiliary substances, partly wrought articles, and commodities in the making or in a finished state.

If the price of raw material, for instance of cotton, rises, then the price of those cotton goods which were made while cotton was cheaper — both half-wrought articles like yarn, and finished goods like cotton fabric — rises along with that of the rest. So does the value of the cotton held in stock and waiting to be worked up and that of the cotton in process of being worked. This last-named cotton then represents by indirection more labor-time than was incorporated in it, and consequently it adds more value than its own original one to the product which it goes to make up, and more than the capitalist paid for it.

If, then, a rise in the price of raw materials finds on the market a considerable quantity of finished commodities, whatever may be the state of their perfection, the value of these commodities rises, and consequently the value of the existing capital is enhanced. The same is true for the supply of raw materials in the hands of the producers. This appreciation of value may indemnify the individual capitalist, or even an entire sphere of capitalist production, for the loss caused by a fall in the rate of profit incidental to a rise in the price of raw materials, or it may even more than make good that loss. Without entering into the details of the effects of competition, we may state for the sake of completeness that, in the first place, when the supplies of raw material held in stock

are considerable, they tend to oppose a rise in the price of raw materials at the place where they are produced; and in the second place, when the half-wrought articles and finished goods press very heavily upon the market, they prevent the price of these things from rising in proportion to the price of their raw materials.

The reverse takes place when there is a fall in the price of raw materials. Other circumstances remaining the same, it increases the rate of profit. The commodities on the market, the articles in the making, and the supplies of raw material depreciate in value and thereby counteract the accompanying rise in the rate of profit.

The effect of a variation in prices of raw materials becomes so much more marked, the smaller a quantity of supplies exists in the sphere of production and on the market, for instance at the close of a business year, when great masses of raw materials are delivered anew, as happens in agriculture after the harvest.

We start in this entire analysis from the supposition that a rise or a fall in prices are the expressions of actual variations in value. But since we are here concerned in the effects of such variations in price on the rate of profit, it matters little what is at the bottom of them. The present statements apply just as well in the case that prices rise or fall, not on account of variations in value, but of the influence of the credit-system, competition, etc.

Seeing that the rate of profit is the expression of the excess of the value of the product over the value of the total capital advanced, a rise of the rate of profit due to a depreciation of the advanced capital would be accompanied by a loss in the value of capital. And a lowering of the rate of profit due to an appreciation of the advanced capital might be accompanied by gains.

As for the other portion of constant capital, such as machinery, and fixed capital in general, the appreciation of values taking place in them, and referring mainly to buildings, real estate, etc., they cannot be discussed without an understanding of the theory of ground rent, and do not belong in

this chapter, for this reason. But they have a general importance for the question of depreciation.

There are, in the first place, constant improvements which lower relatively the use-value, and therefore the exchange-value, of existing machinery, factory equipments, etc. This process has a dire effect especially during the first epoch of newly introduced machinery, before it has reached a certain stage of maturity, when it becomes continually antiquated before it has had time to reproduce its own value. This is one of the reasons for the irrational prolongation of the working time customary at such periods, of working with day and night shifts, in order that the value of the machinery may be reproduced in a shorter time without having to place the figures for wear and tear too high. On the other hand, if a short period of effectiveness of machinery (its short term of life compared to anticipated improvements) is not compensated in this way, then it yields too much of its value to the product by moral wear, so that it cannot compete even against hand-labor.[15]

When machinery, equipment of buildings, and fixed capital in general have reached a certain maturity, so that they remain unaltered in their basic construction, at least for an ordinary length of time, then a similar depreciation takes place in consequence of improvements in the methods of reproduction of this fixed capital. The value of machinery, etc., falls in that case, not because this machinery is rapidly crowded out and depreciated to a certain degree by new and more productive machinery, etc., but because it can be reproduced more cheaply. This is one of the reasons why large enterprises frequently do not flourish until they pass into the second hand, after their first proprietors have been bankrupted, so that their successors, who buy them cheaply, are enabled to begin with a smaller investment of capital at the very outset.

In the case of agriculture it is evident that the same causes which raise the price of the product or lower it must also raise or lower the value of capital, since this capital con-

[15] For illustrations see Babbage, among others. The usual expedient, a reduction of wages, is employed also in this instance, and so this continual depreciation works out quite contrary to the dreams of the harmonious brain of Mr. Carey.

sists to a large degree of this product, such as grain, cattle, etc.

There still remains the variable capital for our consideration.

To the extent that the value of labor-power rises on account of a rise in the price of the means of existence required for its reproduction, or falls on account of a reduction of the value of these means of existence — and a rise or fall in the value of variable capital are but expressions of these two cases — a rise in surplus-value corresponds to such depreciation and a fall in surplus-value to such appreciation, assuming the length of the working-day to remain the same. But other circumstances — a release or tie-up of capital — may accompany such cases, and as we did not analyse them so far, we may briefly mention them now.

If wages fall in consequence of a depreciation of the value of labor-power (which may be accompanied even by a rise in the actual price of labor), then a portion of the capital hitherto invested in wages, is released. Variable capital is set free. For new investments of capital, this signifies a working with a higher rate of surplus-value. It takes less money than before to set in motion the same amount of labor, and in this way the unpaid portion of labor increases at the expense of the paid portion. But in the case of already invested capital not only the rate of surplus-value is raised, but a portion of the capital previously invested in wages is also released. It had been tied up until this time and formed a regular portion which had to be deducted from the proceeds of the product and advanced for wages, in order to perform the functions of variable capital, provided the business was to continue on its former scale. Now this portion becomes disposable and may be used for a new investment, either in the extension of the same business, or to perform a function in some other sphere of production.

Let us assume, for instance, that 500 p.st. were required at first to employ 500 laborers per week, and that now only 400 p.st. are needed for the same purpose. If the mass of value

produced in either case was 1,000 p.st., then the mass of surplus-value produced per week in the first case was 500 p.st., and the rate of surplus-value $\frac{500}{500}$, or 100%. But after the reduction of wages the mass of surplus-value will be 1,000 — 400, or 600 p.st., and its rate $\frac{600}{400}$, or 150%. And this raising of the rate of profit is the only effect produced for any one who starts a new enterprise in this sphere of production with a variable capital of 400 p.st. and a corresponding constant capital. But in a business already existing when this takes place, the depreciation of the variable capital does not only increase the rate of surplus-value from 500 to 600 p.st., and the rate of surplus-value from 100 to 150%, but 100 p.st. of the variable capital are released and enabled to exploit more labor. The same amount of labor is then not alone advantageously exploited, but the release of 100 p.st. makes it possible to exploit more laborers with those 500 p.st. at the increased rate.

Now take the opposite case. Take it that the original proportion of division, with 500 laborers, was 400 v + 600 s, making 1,000, so that the rate of surplus-value was 150%. The laborer, in that case, received $\frac{4}{5}$ p.st., or 16 shillings per week. Now, if in consequence of an appreciation of variable capital 500 laborers cost 500 p.st. per week, then each one of them will receive 1 p.st. per week, and 400 p.st. can employ only 400 laborers. If the same number of laborers as before is to be employed, then we must have 500 v + 500 s, or 1,000. The rate of surplus-value would have fallen from 150 to 100%, which is by one-third. If some new capital were now to be invested, the only effect felt by it would be this lower rate of surplus-value. Other circumstances remaining the same, the rate of profit would also have fallen, although not to the same extent. For instance, if c equals 2,000, we should have in the one case 2,000 c + 400 v + 600 s = 3,000. The rate of surplus-value would be 150%, the rate of profit $\frac{600}{2400}$, or 25%. In the second case we should have 2,000 c + 500 v + 500 s = 3,000. The rate of surplus-value would be 100%, the rate of profit $\frac{500}{2500}$, or 20%. However, for a capital al-

ready invested there would be a twofold effect. Only 400 laborers could be employed with 400 p.st., at a rate of surplus-value amounting to 100%. They would then produce only 400 p.st. of surplus-value. Furthermore, since a constant capital of 2,000 p.st. requires 500 laborers for its operation, 400 laborers could operate only a constant capital of 1,600 p.st. If production is to continue on the same scale as before and one-third of the machinery prevented from remaining idle, then the variable capital must be increased by 100 p.st., in order that 500 laborers may still be employed. And this can be accomplished only by tying up a hitherto disposable capital, so that a portion of the accumulation intended for an extension of production serves then merely for stopping a gap, or a portion reserved for revenue is added to the old capital. A variable capital increased by 100 p.st. produces then 100 p.st. less of surplus-value. More capital is required to employ the same number of laborers, and the surplus-value yielded up by each laborer is at the same time reduced.

The advantages resulting from a release, and the disadvantages resulting from a tie-up of variable capital, affect only capital already engaged and reproducing itself under certain determined conditions. So far as newly invested capital is concerned, the advantage on the one, or the disadvantage on the other side, are limited to a raising or lowering of the rate of surplus-value and a variation of the rate of profit accordingly, if not always in the same proportion.

The release and tie-up of variable capital, analysed in the foregoing, is the result of a depreciation or appreciation of the elements of variable capital, that is to say, of the cost of reproduction of labor-power. However, variable capital might also be released, if the development of the productivity, with the rate of wages unchanged, results in the possibility of getting along with fewer laborers for the operation of the same amount of constant capital. Vice versa, additional variable capital may be formed, if the productive power declines and more laborers are needed to operate the same mass of constant capital. On the other hand, if a portion of capital formerly employed in the capacity of variable capital is trans-

ferred to the constant capital, so that there is merely a different distribution between the components of the same capital, this has its influence on the rate of surplus-value and of profit, but does not belong in this discussion of the release and tie-up of capital.

We have already seen that constant capital may be released or tied up by a depreciation or appreciation of its component elements. Aside from this, it can be tied up only in the case that the productive power of labor increases (not to mention the case in which a portion of the variable is transferred to the constant capital), so that the same amount of labor creates a greater product and therefore operates a larger constant capital. The same may occur under certain circumstances when the productive power decreases, for instance in agriculture, so that the same quantity of labor requires more means of production, such as seeds, manure, drainage, etc., in order to produce the same output. Constant capital may be released without depreciation, when improvements, the harnessing of natural powers, etc., enable a constant capital of smaller value to perform the same technical services as those formerly performed by a constant capital of greater value.

We have seen in volume II that once that the commodities have been converted into money, sold, a certain portion of this money must be reconverted into the material elements of constant capital, and this in proportion to the technical nature of any given sphere of production. In this respect, the most important element in all lines — aside from wages, or variable capital — is the raw material, including the auxiliary substances, which are particularly important, in all lines of production that do not use any raw materials in the strict meaning of the term, for instance in mining and extractive industries in general. That portion of the price which has to make good the wear and tear of machinery plays mainly an ideal role in calculation, so long as the machine is at all in workable condition. It does not matter greatly whether it is paid and replaced by money to-day or to-morrow, or in any other section of the period of turn-over of the capital. It is different with the raw material. If the price of raw material

rises, it may be impossible to make it good fully out of the price of the commodities after deducting the wages. Violent fluctuations of price therefore cause interruptions, great collisions, or even catastrophies in the process of reproduction. It is especially the products of agriculture, raw materials taken from organic nature, which are subject to such fluctuations of value in consequence of changing yields, etc., leaving aside altogether the question of the credit-system, for the present. The same quantity of labor may, in consequence of uncontrollable natural conditions, the favor or disfavor of seasons, etc., be incorporated in very different quantities of use-values, and a definite quantity of these use-values may have very different prices. If the value x is represented by 100 lbs. of the commodity a, then the price of one lb. of a equals $\frac{x}{100}$. If it is represented by 1,000 lbs., the price of one lb. is $\frac{x}{1000}$, etc. This is one of the elements in the fluctuations of the price of raw materials. A second element, which is mentioned at this point only for the sake of completeness, since competition and the credit-system are still outside of the scope of our analysis, is this: It is in the nature of the thing that vegetable and animal substances, which are dependent on certain laws of time for their growth and production, cannot be suddenly augmented in the same degree as, for instance, machines and other fixed capital, or coal, ore, etc., whose augmentation, assuming the natural requirements to be present, can be accomplished in a very short time in an industrial country. It is therefore possible, and under a developed system of capitalist production even inevitable, that the production and augmentation of that portion of the constant capital which consists of fixed capital, machinery, etc., should run ahead of that portion which consists of organic raw materials, so that the demand for these last materials grows more rapidly than their supply, and their price rises in consequence. This rising of prices carries with it the following results: 1) A shipping of raw materials from great distances, seeing that the rising price covers greater freight rates; 2) an increase in their production, which, however, for natural reasons, will not be felt until the following year; 3) a using up of various

hitherto unused accessories, and a better economising of waste. If this rise of prices begins to exert a marked influence on production and supply, the turning point has generally arrived at which the demand lets up on account of the protracted rise of the raw material and of all commodities made up of it, so that a reaction in the price of raw material takes place. Aside from convulsions due to the depreciation of capital in various forms, this reaction is also accompanied by other circumstances which will be mentioned immediately.

So much is evident from the foregoing: To the extent that capitalist production is developed, and with it the means of suddenly and permanently increasing that portion of the constant capital which consists of machinery, etc., and to the extent that accumulation is accelerated (as it is particularly in times of prosperity), to that extent does the relative overproduction of machinery and other fixed capital increase, the relative underproduction of vegetable and animal raw materials become more frequent, the above described rise of their prices and the subsequent reaction more marked. And the revulsions increase correspondingly in frequency, so far as they are due to this violent fluctuation of one of the main elements of the process of reproduction.

Now, if these high prices collapse, because their rise had caused partly a falling off in the demand, partly an extension of production here, an importation of goods from remote and hitherto little noted or neglected regions of production in another place, and with them an excess of the supply over the demand, especially if this excess comes in with the old prices, then we have a result which offers various points of view. The sudden collapse of the price of raw materials checks their reproduction, and consequently the monopoly of the original producing countries, which are favored by the best conditions, is restored. It may be restored with certain limitations but still it is restored. The reproduction of the raw materials proceeds indeed, after the first impulse has been given, on an enlarged scale, especially in countries which have more or less of a monopoly of this production. But the basis on which production takes place after the extension of machin-

ery, etc., and which, after some fluctuations, has to serve as the new point of departure, is very much enlarged by the occurrences of the last cycle of turn-over. At the same time the barely increased reproduction has been considerably checked in the secondary countries of supply. For instance, it can be easily shown by a reference to the export tables that, during the last thirty years (up to 1865) the production of cotton grows in India, whenever there has been a falling off in the American, and that there is after awhile a sudden drop and falling off in the Indian. During the period in which raw materials are high, the industrial capitalists get together in associations for the purpose of regulating production. So they did, for instance, after the rise of cotton prices in 1848, in Manchester, and a similar move was made in the production of flax in Ireland. But as soon as the immediate impulse has worn off, and the principle of competition reigns once more supreme, according to which one must "buy in the cheapest market" (instead of stimulating production in the most favored countries, as those associations attempt to do, without regard to the monetary price at which those countries may just happen to supply their product), the regulation of the supply is left once more to "prices." All thought of a common, far-reaching, circumspect control of the production of raw materials gives way once more to the belief that demand and supply will mutually regulate one another. And it must be admitted that such a control is on the whole irreconcilable with the laws of capitalist production, and remains for ever a platonic desire, or is limited to exceptional co-operation in times of great stress and helplessness.[16] The

[16] Since the above was written (1865), competition on the world-market has been considerably intensified by the rapid development of industry in all civilized countries, especially in America and Germany. The fact that the rapidly and enormously growing productive forces grow beyond the control of the laws of the capitalist mode of exchanging commodities, inside of which they are supposed to move, this fact impresses itself nowadays more and more even on the minds of the capitalists. This is shown especially by two symptoms. First, by the new and general mania for a protective tariff, which differs from the old protectionism especially by the fact that now the articles which are capable of being exported are the best protected. In the second place it is shown by the trusts of manufacturers of whole spheres of production for the regulation of production, and thus of prices and profits. It goes without saying that these experiments are practicable only so long as the economic weather is relatively favorable. The

superstition of the capitalists in this respect is so crude that even the factory inspectors lift their hands in surprise, in their reports. The variation of good and bad years, of course, leads at times to the production of cheaper raw materials. Aside from the direct effect of this on the extension of the demand, an added stimulant is found in the previously mentioned influence on the rate of profit. Thereupon the aforesaid process of a gradual overtaking of the production of raw materials by that of machinery, etc., is repeated on a larger scale. An actual improvement of raw materials in such a way that not only their quantity, but also their quality would come up to expectations, for instance supplying cotton of American quality from Indian fields, would necessitate a long continued, progressively growing, and steady European demand (quite aside from the economic conditions under which the Indian producer labors in his country). As it is, the sphere of production of raw materials is extended only convulsively, being now suddenly enlarged, and then violently contracted. All this, and the spirit of capitalist production in general, may be very well studied in the cotton crisis of 1861–65, which was further aggravated by the fact that raw materials were at times entirely missing which are one of the principal factors of reproduction. The price may also rise while there is an abundant supply, namely in the case that this abundance takes place under difficult conditions. Or, there may be an actual shortage of raw material. It was the last condition which originally prevailed in the cotton crisis.

The closer we approach in the history of production to our own times, so much more regularly do we find, especially in the essential lines of industry, the ever recurring fluctuation between a relative appreciation and the resulting depreciation of raw materials purloined from organic nature. The preceding statements will be verified by the following illustrations from reports of factory inspectors.

first storm must upset them and prove, that, although production assuredly needs regulation, it is certainly not the capitalist class which is fitted for that task. Meanwhile the trusts have no other mission but to see to it that the little fish are swallowed by the big fish still more rapidly than before. — F. E.

The moral of this story, which may also be deduced from other observations in agriculture, is that the capitalist system works against a rational agriculture, or that a rational agriculture is irreconcilable with the capitalist system, although technical improvements in agriculture are promoted by capitalism. But under this system, agriculture needs either the hands of the self-employing small farmer, or the control of associated producers.

We present now the following illustrations from the English factory reports.

According to R. Baker, factory reports for October, 1858, pages 56–61, the condition of business was then better. But the cycle of good and bad times was shortened with the increase of machinery, and to the extent that the demand for raw materials increases, the fluctuation in the conditions of business occur more frequently. For the time being confidence had been restored after the panic of 1857, and the panic itself seemed almost forgotten. Whether this improvement would be lasting, depended, in Baker's opinion, to a large extent on the price of raw materials. He saw indications that the maximum had already been reached, beyond which manufacture becomes less and less profitable, and finally ceases altogether to yield any profits. Taking the prosperous years in the worsted business, 1849 and 1850, it will be seen that the price of English carded wool was 13 d., and of Australian, 14 to 17 d. per lb., and that the average price of English wool, for the decade from 1841 to 1850, never exceeded 14 d., nor that of Australian 17 d. But at the beginning of the disastrous year 1857, Australian wool was quoted at 23 d. It fell in December, at the time of the worst panic, to 18 d., but rose once more in the course of the year 1858 to 21 d. English wool likewise began in 1857 with 20 d., rose in April and September to 21 d., fell in January, 1858 to 14 d., and rose subsequently to 17 d., so that it stood 3 d. per lb. higher than the average of the aforementioned 10 years. This shows, in Mr. Baker's opinion, that either the failures of 1857, which were due to similar prices, have been forgotten,

or that barely enough wool is produced to keep the existing spindles running. Or the prices of fabrics may experience a lasting rise. But he has seen in his experience that spindles and frames multiplied in an incredibly short time, not only in numbers, but also in speed; that the English wool export to France rose at almost the same rate, while the average age of sheep in England and other countries was steadily reduced, since the population was rapidly increasing and breeders were trying to turn their stock into money as quickly as possible. He often was seriously alarmed, when he saw people, ignorant of these facts, invest their ability and their capital in enterprises whose success depended on the supply of a product which can be increased only according to certain organic laws. The conditions of supply and demand of all raw materials seems to explain to Mr. Baker many fluctuations in the cotton business as well as the condition of the English wool market in the fall of 1857 and the subsequent commercial crisis.[17]

The most flourishing time of the worsted industry of the West-Riding of Yorkshire was from 1849 to 50. This industry employed 29,246 persons in 1838, 37,000 persons in 1843, 48,097 in 1845, 74,891 in 1850. (Factory Reports, 1850, page 60.) This prosperity of the carded wool industry began to excite certain forebodings in October, 1850. In his report for April, 1851, sub-inspector Baker says in regard to Leeds and Bradford that the condition of business is very unsatisfactory. The carded wool spinners are rapidly losing the profits of 1850, and the majority of the weavers do not make much progress. He believes that more wool machinery is momentarily standing idle than ever before, and the flax spinners are likewise discharging laborers and stopping machinery. The cycles of the textile industry are very uncertain, and he thinks that people will soon realise that no proportion is observed between the productivity of the spindles, the quantity of raw materials, and the increase of population. (Page 52.)

[17] It goes without saying that we do not, with Mr. Baker, explain the wool crisis of 1857 out of the disproportion between the raw material and the product. This disproportion was itself but a symptom, and the crisis was general.— F. E.

The same is true of the cotton industry. In the same report for October, 1858, we read that, since the fixing of the hours of labor in factories, the amounts of raw material consumed, of production, and of wages in all textile industries have been reduced to a simple rule of three. The inspector quotes from a recent lecture by Mr. Payns, who was then mayor of Blackburn, on the cotton industry, in which the industrial statistics of that region were very accurately compiled. The mayor said in substance that every actual horse-power operates 450 self-actor spindles with preparatory spinning machinery, or 200 throstle spindles, or 15 looms for cloth 40 inches wide, with machinery for reeling, warping and smoothing. Every horse-power employs two and a half laborers in spinning, or 10 in weaving. Their average wages are fully 10½ shillings per capita per week. The worked up average numbers are Nos. 30–32 for the warp and Nos. 34–36 for the woof. Assuming the product of one week's spinning to be 15 ounces per spindle, the weekly output of yarn would be 824,700 lbs., which imply a consumption of 970,000 lbs., or 2,300 bales of cotton valued at 28,300 p.st. In a circle of five miles around Blackburn the weekly consumption of cotton amounted to 1,530,000 lbs., or 3,650 bales, at a cost-price of 44,625 p.st. This is one-eighteenth of the entire cotton spun in the United Kingdom, and one-sixteenth of the entire mechanical weaving.

The inspector says that according to the calculations of Mr. Payns the total number of cotton spindles in the United Kingdom would be 28,800,000, and it would require 1,432,080,000 lbs. of cotton to keep them going at full speed. But the cotton imports, after deducting the exports, amounted in 1856 and 1857 only to 1,022,576,832 lbs. so that there must have been a shortage of 409,503,168 lbs. Mr. Payns, who had the kindness to discuss this point with the inspector, held that a computation of the annual consumption of cotton, based on the consumption of the Blackburn district, would total up too high, on account of the difference, not only of the numbers spun, but also of the excellence of the machinery. He estimated the total consumption of cotton per year in the

United Kingdom at 1,000 million lbs. But if he is correct, and there is actually a surplus-import of 22½ million lbs., then the inspector thinks that demand and supply are nearly balanced, without taking into account the additional spindles and looms which are about to be erected in Mr. Payns' own district, according to him, and the same applies probably to other districts as well. (Pages 59, 60.)

III. *General Illustration. The Cotton Crisis of 1861–1865. Preliminary History, 1845–1860.*

1845. Prosperity of cotton industry. Price of cotton very low. L. Horner says on this point that he has not witnessed a more active period of business than that of the last summer and fall. Especially in the spinning of cotton. Throughout the entire six months he received every week reports of new investments of capital in factories. Now new factories were being built, now the few vacant ones had found new renters, now factories which were in operation were extended, new and stronger steam engines installed and more working machinery added. (Factory Reports, November, 1845, page 13.)

1845. The complaints are beginning. For some time the inspector hears general complaints among the manufacturers over the depressed state of their business. During the last six weeks, he says, various factories have begun working short time, generally 8 hours instead of 12. This seemed to become general. There had been a great rise in the price of cotton, while the price of the products had not alone not risen, but fallen to a lower figure than that before the rise in cotton. The great increase in the number of cotton factories during the preceding four years must have caused a strong increase in the demand for raw material and a large supply of products on the market. Both of these things must have operated to depress profits, so long as the supply of raw material and the demand for the product remained unchanged. But they actually had a far stronger influence, because the supply of cotton had recently been insufficient, and the de-

mand for the product had let up in various inland and foreign markets. (Factory Reports, December, 1846, page 10.)

The rising demand for raw materials went, of course, hand in hand with the overstocking of the market with products. By the way, at that period the expansion of industry and the subsequent stagnation were not confined to the cotton districts. The carded wool district of Bradford contained in 1836 only 318 factories, but 490 in 1846. And these figures do not by any means express the actual extension of production, since the existing factories were at the same time considerably enlarged. This was especially true of the flax mills. According to the factory report, November, 1846, page 30, all of them had contributed more or less, during the preceding 10 years, to that overstocking of the market which was to blame for the stagnation of business at the time being. The depression in business followed naturally after such a rapid expansion of factories and machinery.

1847. In October, a money panic. Discount 8%. This was preceded by a collapse of railroad speculation, and of jobbing with East-Indian bills of exchange.

The factory report for October, 1847, page 30, states that Mr. Baker presented very interesting details concerning the rise in the demand for cotton, wool, and flax, in recent years, caused by the expansion of these industries. He held that the increased demand for these raw materials, particularly at a time when their supply had fallen far below the average, was sufficient to explain the prevailing depression in those lines of business, without reference to the insecurity of the money-market. This view was fully supported by the personal experience of the writer of the report, and by statements made to him by experts in business. All these various lines of business had been very much depressed, when discounts were still practicable at 5% and less. On the other hand, the supply of raw silk was abundant, prices reasonable, and the business correspondingly brisk until a few weeks previously, when doubtless the money-panic affected not only the dealers in raw silk, but still more their principal customers, the manufacturers of custom made goods. A glance at the published offi-

cial reports showed that the cotton industry had increased by almost 27% during the preceding three years. As a result, cotton had risen in round figures from 4 d. to 6 d. per lb., while yarn, thanks to the increased supply, stood only a trifle above its former price. The wool industry commenced to expand in 1836. Since then it had grown by 40% in Yorkshire, and still more in Scotland. The increase in the worsted industry was still larger.[18] The calculations showed in its case, for the same length of time, an expansion of more than 74%. The consumption of raw wool had, therefore, been very large. The linen industry showed since 1839 an increase of about 25% in England, 22% in Scotland, and almost 90% in Ireland,[19] the consequence of this, and of the failure of flax crops, was that the price of the raw material rose by 10 p.st. per ton, while the price of yarn had fallen by 6 d. per bundle.

1849. Beginning with the last months of 1848, business revived. According to factory reports, 1849, pages 30, 31, the price of flax, which was so low that it guaranteed a reasonable profit under all possible future circumstances, induced manufacturers to push their business steadily. The wool manufacturers were very busy for a time in the beginning of the year. The writer of the report feared, however, that consignments of woolen goods often took the place of real demand, and that periods of seeming prosperity, that is to say, of full employment, did not always coincide with periods of legitimate demand. The worsted business was particularly good for some months. In the beginning of this period, wool stood especially low. The mill-owners had stocked themselves at advantageous prices, and no doubt in considerable quantities. When the price of wool rose with the spring auctions, the mill-owners had the advantage, and they retained it, since the demand for goods became strong and irresistible.

[18] A careful distinction is made in England between the woollen manufacture, which spins carded yarn from short wool and weaves it (main centre Leeds), and the worsted manufacture, which makes worsted yarn from long wool and weaves it (main seat Bradford, in Yorkshire).— F. E.

[19] This rapid expansion of the manufacture of linen yarn by machinery, in Ireland, gave the death-blow to the exportation of the linen made of hand-made yarn in Germany (Silesia, Lusatia, and Westphalia).—F. E.

On page 42 of the factory report for April, 1849, we read that, considering the fluctuations in the conditions of business, which had taken place in the factory districts for three or four years, it must be admitted that there is somewhere some great disturbing cause. May not the productive power of the increased machinery have become a new element?

In November, 1848, in May, summer, and up to October, 1849, business became more and more flourishing. The same report states on pages 42 and 43, that this applies particularly to the manufacture of goods from worsted yarn, which centers in Bradford and Halifax. At no previous time did this business approximate the extension which it had then. The speculation in raw materials, and the uncertainty of its probable supply, has always caused greater excitement and more frequent fluctuations in the cotton industry than in any other line of business. For the time being there was an accumulation of supplies of the coarser grades of cotton goods, which worried the small mill-owners and placed them at a disadvantage, so that some of them were working short time.

1850. April. Business continued brisk. Exception, according to factory report, April, 1850, page 54: There is a great depression in a portion of the cotton industry as a result of insufficient supplies of raw material precisely for coarse grades of yarn and heavy textures. It is feared that the increased machinery lately installed in the worsted business may bring about a similar reaction. Mr. Baker calculates that alone in the year 1849, the product of the looms in this business has grown by 40%, and that of the spindles by 25 to 30%, and the expansion is still continuing at the same rate.

1850. October. The factory report for October states on page 15 that the price of cotton continues to cause considerable depression in this line of industry, especially for such goods as require a considerable portion of the cost of production to be spent for raw material. The great rise in the price of raw silk has led to an aggravation of the situation in many instances, also in this line. And on page 33 of the same report we learn that the committee of the Royal Association for

Flax Culture in Ireland was of the opinion that the high price of flax, together with the low level of prices of other agricultural products, had safeguarded a considerable increase in the production of flax for the ensuing year.

1853. April. Great prosperity. L. Horner says in the factory report for April, 1853, page 19, that at no time during the 17 years, in which he took official notice of the condition of the factory districts of Lancashire, has he seen such general prosperity. The activity in all lines was extraordinary.

1853. October. Depression in the cotton industry. Overproduction. (Factory Report, October, 1853, page 15.)

1854. April. The factory report for 1854, page 37, states that the wool business, while not brisk, furnished full employment for all factories. The same held good of the cotton industry. The worsted business was irregular throughout the entire preceding half year. There was a disturbance in the linen industry in consequence of the reduced supply of flax and hemp from Russia, on account of the war in the Crimea.

1859. According to the factory report for April, 1859, page 19, business was still depressed in the Scotch linen industry, because the raw material was scarce and dear. The low quality of the preceding crop in the Baltic countries, from which came the main supply, was expected to exert an injurious influence on the business of this district. On the other hand, jute, which displaced flax for many coarse goods, was neither uncommonly dear nor scarce. About one-half of the machinery in Dundee was spinning jute. The factory report for October, 1859, states on page 30, that in consequence of the high price of raw material, flax spinning is not yet profitable, and while all other factories are running on full time, there are various instances of idle flax machinery. The jute mills are in a satisfactory condition, since recently this material has fallen to a reasonable figure.

1861–64. American Civil War. Cotton Famine. The Greatest Illustration of an Interruption in the Process of Production through Scarcity and Dearness of Raw Material.

1860. April. The reporting inspector says in substance in factory report, April, 1860: I am pleased to be able to inform you that, in spite of the high price of raw materials, all textile industries, with the exception of silk, have been well employed during the last half year. In some of the cotton districts, laborers were advertised for, and secured by immigration from Norfolk and other rural counties. There seems to be a great lack of raw materials in all branches of industry. It is alone this lack which holds us back. In the cotton business, the number of factories erected, the extension of already existing ones, and the demand for laborers, has probably never been so great. Raw materials are sought on all sides.

1860. October. The factory report for October, 1860, states on page 37, that the condition of business in the cotton, wool, and flax districts has been good. It is reported to have been very good in Ireland, for more than a year, and would have been still better but for the high price of raw materials. The flax mills seem to be waiting with more impatience than ever for the opening of the resources of India by railroads, and for a corresponding development of its agriculture, in order to secure at last a supply of flax sufficient for their requirements.

1861. April. The factory report for April, 1861, states on page 33 that the condition of business for the time being was depressed. A few cotton goods factories were working short time, and many silk factories were running only a part of the time. Raw materials were dear. In almost every textile branch raw materials were quoted above the price at which they could be worked by the mass of the consumers.

It now became evident that the cotton industry had produced too much in 1860. The effect of this made itself felt for the next few years. The factory report for December, 1863, page 127, states that it took between two and three years

for the world-market to absorb the overproduction of 1860. And the factory report for October, 1862, pages 28 and 29, says in so many words: The depressed condition of the markets for cotton goods in Eastern Asia, in the beginning of 1860, had a corresponding influence on the business in Blackburn, where on an average of 30,000 mechanical looms are almost exclusively engaged in the production of goods for this market. The demand for labor was, therefore, already restricted at this point many months before the effects of the blockade made themselves felt. Fortunately, many factories were thereby saved from ruin. The supplies rose in value so long as they were held in stock, and this prevented the appalling depreciation which is otherwise inevitable in such a crisis.

1861. October. According to the factory report for October, 1861, page 19, the business has been depressed for some time. It is not at all improbable that many factories will materially reduce their working time during the winter months. However, this was to be anticipated; quite aside from the causes which have interrupted the ordinary supply of cotton from America and the English exports, it would have been necessary to reduce the hours of labor during the coming winter, on account of the strong increase of production in the preceding three years, and the disturbance of the Indian and Chinese markets.

Cotton Waste. East Indian Cotton. (Surat.) Influence on the Wages of Laborers. Improvement of Machinery. Substitution of Starch Flour and Minerals for Cotton. Effect of this Starch Flour Ingredient on the Laborers. Manufacturers of Fine Grades of Yarn. Fraud on the Part of the Manufacturers.

An inspector writes in the factory report for October, 1863, page 63: A manufacturer thinks that, so far as the estimate of the cotton consumption per spindle is concerned, I did not sufficiently appreciate the fact that, when a cotton is dear, every manufacturer of ordinary yarns (say up to No. 40, mainly from 12 to 32) spins as fine grades as he possibly can, that is to say, he will spin No. 16 instead of 12, or 22 instead

of 16, etc. And the weaver who works up these fine yarns, will raise his calico to the regular weight by adding so much more glue. This expedient is now used to a shameful degree. I have it on good authority that there are ordinary shirtings for export weighing 8 lbs. per piece, of which 2 lbs. were glue. Textures of other kinds are often given as much as 50% of glue, so that that manufacturer does not lie by any means who boasts of becoming a rich man by selling his fabrics at less money per pound than he paid for the yarn of which they are made.

We read furthermore in the same place: I have also been told that the weavers ascribe the growth of disease among themselves to the glue used in the woof of East-Indian Cotton and not merely consisting of flour, as heretofore. This substitute for flour is said to have the very great advantage of increasing the weight of fabrics considerably, so that 15 lbs. of yarn, after being woven, weigh 20 lbs. (This substitute was ground talcum, called China clay, or gypsum, called French chalk.) The wages of the weavers (meaning the laborers) have been very much reduced by the employment of substitutes for flour in the making of weaver's glue. This glue renders the yarn heavier, but also stiff and brittle. Every thread of the yarn passes in the loom through the bobbin, whose strong threads keep the woof in position. The stiffly glued woof continually causes breaks in the thread of the bobbin. Every break causes a loss of five minutes to the weaver for repairs. The weavers have to repair such breaks ten times as often as formerly, and the loom naturally turns out so much less during working hours. (Pages 42 and 43.)

In Ashton, Stalybridge, Oldham, etc., the working hours have been reduced by at least one-third, and are reduced still more every week. This reduction of the hours of labor is in many instances accompanied by a reduction of wages. (Page 13.) In the beginning of 1861, a strike took place among the mechanical weavers in some parts of Lancashire. Several manufacturers had announced a reduction of wages by 5 to 7.5%. The laborers insisted that the scale of wages should be maintained and the hours of labor reduced. This was

not granted, and a strike was called. After one month, the laborers had to give in. But then they got both. Aside from a reduction of wages which the laborers finally accepted they also worked short time in many factories. (Factory Report, April, 1863, page 23.)

1862. April. The sufferings of the laborers had considerably increased since the last report was made. But at no time in the history of this industry have so sudden and so grievous ills been borne with so much quiet resignation and such patient self-respect. (Factory Report, April, 1862, page 10.) The proportion of the temporarily totally unemployed laborers does not seem to be much larger than in 1848, when there was an ordinary panic, which, however, was of sufficient force to induce the worried manufacturers to compile a similar statistics on the cotton industry as that now given out weekly. In May, 1848, 15% of all the cotton employes of Manchester were idle, 12% worked short time, while more than 70% worked on full time. On May 28, 1862, there were 15% idle, 35% working on short time, and 49% on full time. In the neighboring places, for instance at Stockport, the percentage of the idle and partly employed is higher, that of the fully employed lower, because coarser numbers are spun there than in Manchester. (Page 16.)

1862. October. According to the last official statistics, there were in the United Kingdom 2,887 cotton factories, of which 2,109 were in the districts of Lancashire and Cheshire. The reporting inspector knew well enough that a very large number of the 2,109 factories in his district were small establishments, which employed but a few laborers. But he was surprised when he found how large was the number of these. There were 392, or 19%, which had less than 10 horse-power motors (steam or water); 345, or 16%, had between 10 and 20 horse-powers; 1,372 had 20 horse-powers or more. A very large portion of the small manufacturers, more than one-third, had been laborers not very long ago. They are men without a command of capital. The main burden would fall upon the other two-thirds. (Factory Reports, October, 1862, pages 18, 19.)

According to the same report, 40,146, or 11.3% of the cotton employes of Lancashire and Cheshire, were then working full time; 134,767, or 38%, were working a part of the time; 197,721, or 50.7%, were unemployed. If we deduct from these figures the data referring to Manchester and Bolton, where mainly fine numbers were spun, a line little affected by the cotton famine, then the matter looks still more unfavorable, namely fully employed 8.5%, partly employed 38%, unemployed 53.3%. (Pages 19 and 20.)

It makes an essential difference for the laborers whether good or bad cotton is worked up. In the first months of the year, when the manufacturers sought to keep their factories going by using up all the cotton bought at cheap prices, much bad cotton went into factories that usually worked only with good cotton. The difference in the wages of the laborers was so great that many strikes took place because no living wage could be made at the old piece wages. In a few instances the difference due to the employment of bad cotton amounted to one-half of the total wages, even at full time. (Page 27.)

1863. April. In the course of this year, not more than about one-half of the cotton employes will work on full time. (Factory Report, April, 1863, page 14.)

A very serious inconvenience in the employment of East-Indian cotton, such as the factories must use at this time, is that the speed of the machinery must be considerably reduced with it. During the last years, everything has been tried to increase the speed, so that the same machinery might do more work. However, the reduced speed hits the laborer as much as the manufacturer. For the majority of the laborers are paid by the piece, the spinners receiving so much per lb. of yarn spun, the weavers so much per piece woven. And even the others, who work on weekly wages, will suffer a reduction through the restriction of production. According to the researches of the inspector, and the data received by him, referring to the wages of the cotton employes during the year, there is an average reduction of 20% in some cases as much as 50%, compared to the wages which were in vogue in 1861. (Page 13.) The amount earned depends on the quality of

the material worked up. The condition of the laborers, so far as earnings are concerned, is much better now (October, 1863) than at the same time last year. The machinery has been improved, the raw material is better known, and the laborers overcome the difficulties better with which they had to struggle in the beginning. In the previous spring, the inspector was in a sewing school in Preston (a charity institution for unemployed). Two young girls, who had been sent to a weaving establishment on the strength of a promise that they would be able to make 4 shillings per week, asked to be readmitted to the school and complained that they could not make 1 shilling per week. The inspector has had information concerning self-acting minders, that is to say, men who operate a few self-actors, who had earned 8 sh. 11d. after 14 days of full employment, and their house-rent was deducted from this sum. The manufacturer returned one-half of this rent to them as a gift. (How generous!) The minders carried home the amount of 6 sh. 11 d. In some places the self-acting minders earned from 5 to 9 sh. per week, the weavers from 2 to 6 sh. per week, during the last months of 1862. At the time of the report there was a healthier condition of things, although even then the earnings in most districts had decreased still more. Other conditions contributed to the scanty earnings, aside from the shorter staple of East-Indian cotton and its impurity. For instance, it had become the custom to mix plenty of cotton waste with the Indian cotton, and this increases, of course, the difficulties for the spinner. Owing to the shortness of the fiber, the threads break more easily in drawing out the mule and twisting the yarn, and the mule cannot be kept going so regularly. Furthermore, one girl frequently can watch but one loom, because she must pay more attention to the threads. But few of them have more than two looms. In many cases the wages of the laborers have been reduced by 5, 7.5, and 10%. In the majority of cases the laborer must handle his raw material as best he may, and try to make wages at the ordinary scale to the best of his power. Another difficulty with which the weavers have sometimes to struggle is that they are supposed to make good

fabrics out of bad materials, and are fined by deductions from their wages, if the work is not all that is desired. (Factory reports, October, 1863, pages 41–43.)

Wages were miserable, even in places where full time was worked. The cotton employes willingly offered themselves for all public labors, drainage, road building, stone breaking, street paving, which they did in order to get their keep from the authorities (although this amounted practically to an assistance for the manufacturers. See volume I, chapter XXV, 3.) The whole bourgeoisie stood guard over the laborers. If the worst of a dog's wages were offered, and the laborer refused to accept them, then the Assistance Committee struck him from their list. It was in a way a golden age for the manufacturers, for the laborers had either to starve or work at any price profitable for the bourgeois. The Assistance Committees acted as watch-dogs. At the same time the manufacturers, in secret agreement with the government, hindered emigration as much as possible, either for the purpose of having their capital, invested in the flesh and blood of laborers, ready at hand, or of safeguarding the squeezing of rent out of the laborers.

The Assistance Committees acted with great severity in this matter. If work was offered, the laborers to whom it was offered were stricken from the lists and compelled to accept. If they refused to begin work, the reason was that their earnings were but nominal, while the work was extraordinarily hard. (Page 97.)

The laborers were willing to perform any work for which they were employed in consequence of the Public Work Acts. The principles according to which industrial occupations were assigned, varied considerably in different cities. But even in places where work in the open air was not absolutely regarded as a labor test, this labor was either compensated with the bare ordinary charity sum, or so insignificantly better that it actually became a labor test. (Page 69.) The Public Works Act of 1863 was to remedy this evil and to enable the laborer to earn his wages as an independent day laborer. The purpose of this Act was threefold: 1) To enable local

authorities to borrow money from the loan treasury commissioners (with the consent of the president of the state's central poor boards; 2) to facilitate improvements in the cities of the cotton districts; 3) to secure work and remunerative wages for the unemployed laborers. Up to the end of 1863, loans to the amount of 883,700 p.st. had been granted under this Act. (Page 70.) The enterprises started were mainly canalisation, road building, street paving, reservoirs for water works, etc.

Mr. Henderson, president of the committee of Blackburn, wrote with reference to this to factory inspector Redgrave, that in his entire experience in the course of this period of suffering and misery nothing had struck him more emphatically or given him so much pleasure as the serene willingness with which the unemployed laborers of his district accepted the work offered to them by the city council of Blackburn pursuant to the Public Works Act. A greater contrast could hardly be imagined than that between the cotton spinner, who formerly worked as a skilled man in the factory, and the day-laborer, who now works in a depth of 14 or 18 feet on a drainage canal. (They earned thereby about 4 to 12 sh. per week, according to the size of their families, and this last enormous amount had to provide sometimes for a family of eight. The gentlemen of the bourgeoisie derived a double profit from this. In the first place, they secured money for the improvement of their smoky and neglected cities at exceptionally low interest. In the second place, they paid wages to the laborers at a scale far below the ordinary.) Mr. Henderson thinks that this ready willingness on the part of the laborers to accept the offered employment implied great self-denial and consideration, and deserved all honor, since they were accustomed to an almost tropical temperature, to work in which skill and accuracy counted for more than muscular strength, and to wages which were double, or sometimes treble, of what they could earn now. In Blackburn the men were tried at all possible kinds of labor in the open air. They dug through a stiff and heavy clay soil to a considerable depth, they did drainage work, broke stones, built roads, made excavations

for street canals to a depth of 14, 16, and sometimes 20 feet. Frequently they stood in mud and water from 10 to 12 inches deep, and they were exposed to a climate whose wet cold was not exceeded, or perhaps not equalled, in any other district of England. (Pages 91 and 92.) The attitude of the laborers has been almost faultless, their willingness to accept work in the open air and to get along on it. (Page 69.)

1864. April. Occasionally complaints about lack of laborers are heard in various districts, especially in certain branches, for instance weaving. But these complaints are due as much to the low wages which the laborers may earn in consequence of the bad kinds of yarn as to an actual scarcity of laborers in this particular line. Numerous disputes over wages took place during the preceding month between some manufacturers and their laborers. The inspector regrets that strikes occurred far too frequently. The effect of the Public Works Act is now resented by the manufacturers as a competition, and as a result the local committee of Bacup has suspended its activity. For although all the factories are not yet running, there has already been a lack of laborers. (Factory Report, April, 1864, pages 9 and 10.) It was indeed high time for the manufacturers to act. In consequence of the Public Works Act the demand for laborers grew so much that many a factory hand was making 4 to 5 shillings per day in the quarries of Bacup. And so the public works were gradually suspended; this new edition of the *Ateliers nationaux* of 1848, which had this time been opened in the interests of the bourgeoisie.

Trying it on the Dog.

Although the very reduced wages (of the fully employed), the actual earnings of the laborers in the different factories, have been given, it does not follow that they earn the same amount week after week. The laborers are exposed to great fluctuations at this place, in consequence of the continual experiments made by the manufacturers with different kinds and proportions of cotton and waste in the same factory. The "Mixtures," as they are called, are frequently changed, and the

earnings of the laborers rise and fall with the quality of cotton mixtures. At times they earned only 15% of their former wages, and in one or a couple of weeks wages fell to 50 or 60%. Inspector Redgrave, who makes this report, then proceeds to figures of wages selected from practical life. The following examples may suffice:

A, weaver, family of 6 persons, employed 4 days in the week, 6 sh. 8.5 d.; B, twister, 4.5 days per week, 6 sh.; C, weaver, family of 4, 5 days per week, 5 sh. 1 d.; D, slubber, family of 6, employed 4 days per week, 7 sh. 10 d.; E, weaver, family of 7, employed 3 days, 5 sh., etc. Redgrave continues in substance: These data deserve attention, for they prove that labor would become a misfortune in some families, since it reduces not only the earnings, but depresses them so low that they become totally insufficient to satisfy anything but a small part of a family's absolute necessities, unless additional assistance were given in cases where the earnings of a family do not reach the amount which would be granted to them if all of them were unemployed. (Factory Reports, October, 1863, pages 50–53.)

In no week since June 5, 1863, has the average total employment of all laborers been more than 7 hours and some minutes. (Page 121.)

From the beginning of the crisis to March 23, 1863, nearly three million pounds sterling were expended by the poor boards, the central committee of charity, and the London Mansion House committee. (Page 13.)

In one district, in which perhaps the finest yarn is spun, the spinners suffer an indirect reduction of wages of 15% as a result of passing from Sea Island to Egyptian cotton.

In one extended district, in which cotton waste is used in large quantities as an admixture to Indian cotton, the spinners have had their wages reduced by 5%, and lost besides from 20 to 30% by working up Surat and waste. The weavers have dropped from four looms to two. In 1860 they made 5 sh. 7 d. on each loom, but in 1863 only 3 sh. 4 d. The fines, which amounted to from 3 to 6 d. per spinner on American cotton, now run as high as 1 sh. to 3 sh. 6 d. In one

district, in which Egyptian cotton was used, mixed with East-Indian, the average earnings of the mule spinners in 1860 was from 18 to 25 sh., while it is only from 10 to 18 sh. now. This not exclusively due to deteriorated cotton, but also to the decreased speed of the mule, in order to give to the yarn a stronger twist, for which extra payment according to the wage scale would have been made in ordinary times. (Pages 43, 44, 45–50.) Although East-Indian cotton may have been worked here and there at a profit for the manufacturers, the wage list on page 53 shows that the laborers suffer from it, compared with 1861. If the use of Surat becomes a settled fact, the laborers would demand the same wages as in 1857. But this would seriously affect the profits of the manufacturers, unless it would be balanced by the price of either the cotton or the products. (Page 105.)

House-Rent. The house-rent of the laborers living in cottages belonging to the manufacturers, is frequently deducted from their wages, even if only short time is worked. Nevertheless the value of these buildings has fallen, and the cottages are now from 25 to 50% cheaper than formerly. A cottage which formerly rented from 3 sh. 6 d. per week, may now be had for 2 sh. 4d., and sometimes for less. (Page 57.)

Emigration. The employers were, of course, opposed to the emigration of the laborers, in the first place because they wished, in the expectation of better times in the cotton industry, to keep the means at hand for the profitable operation of their factories. In the second place some employers are owners of cottages in which their employes are to live, and at least some of them calculate without fail to collect at least a portion of the rent due them. (Page 96.)

Mr. Bernall Osborne says in a speech to his parliamentary constituents, on October 22, 1864, that the laborers of Lancashire had behaved like ancient stoic philosophers. Perhaps they acted like sheep?

CHAPTER VII.

ADDITIONAL REMARKS.

Take it, in accordance with the assumption on which this section is based, that the mass of profit appropriated in any particular sphere of production is equal to the sum of the surplus-values produced by the total capital invested in this sphere. Nevertheless the bourgeois will not consider his profit as identical with the surplus-value, that is to say, with unpaid surplus-labor. And he will do so, for the following reasons.

1) He forgets the process of production in the process of circulation. He is of the opinion that surplus-value is made by his realisation on the value of commodities, which includes realisation on their surplus-value. [There is a blank at this place, indicating that Marx intended to dwell in detail on this point.— F. E.]

2) Assuming a uniform degree of exploitation, we have seen that the rate of profit may differ considerably according to the relative cheapness or dearness of raw materials and the experience of the buyer, according to the relative productivity, efficacy, and cheapness of the machinery employed, according to the greater or lesser perfection of the general equipment of the various stages of the productive process, the simplicity and effectiveness of the management, etc.; all this without reference to any modifications due to the credit-system, to the mutual cheating of the capitalists among themselves, to any favorable choice of the market. In short, given the surplus-value for a certain capital, it depends still very much on the individual business ability of the capitalist, or of his managers and salesmen, whether this same surplus-value realises a greater or smaller rate of profit and thus yields a greater or smaller mass of profit. The same surplus-value of 1,000

p.st., a product of 1,000 p.st. of wages, may be calculated in the business of A on 9,000 p.st., in the business of B on 11,000 p.st. of constant capital. In the case of A we have then $p' = \frac{1000}{10,000}$, or 10%. In the case of B we have $p' = \frac{1000}{12,000}$, or $8\frac{1}{3}$%. The total capital produces relatively more profit in the business of A than in that of B, although the variable capital advanced in either case is 1,000 p.st., and the surplus-value produced by it likewise 1,000 p.st., so that there is in both cases the same degree of exploitation of the same number of laborers. This difference in the materialisation of the same mass of surplus-value, or the difference in the rates of profit, may also be due to other causes. Still, it may be due wholly to a difference in business ability in both establishments. And this fact leads the capitalist to the conviction that his profits are due, not to the exploitation of labor, but at least, in part, to other circumstances independent of that exploitation, particularly to his individual activity.

The analyses of this part of the work demonstrate the erroneousness of the view (Rodbertus) according to which (in distinction from ground-rent, in the case of which the area of real-estate is said to remain the same and yet to produce a higher rent) a change in the magnitude of a certain capital is said to have no influence on the proportion of profit to capital, and thus on the rate of profit, on the assumption that the mass of capital, on which profits are calculated, grows simultaneously with the mass of profits, and vice versa.

This is true only in two cases. In the first place, it is true, assuming all other circumstances, especially the rate of surplus-value, to remain unchanged, if there is a change in the value of that commodity which is a money-commodity. (The same occurs in the case of a merely nominal change of value, the rise or fall of mere tokens of value while other circumstances remain the same.) Take it that the total capital amounts to 100 p.st., with a profit of 20 p.st., so that the rate of profit is 20%. Now, if gold rises or falls by 50%, the same capital, in the first eventuality, will be worth 150 p.st., which was previously worth only 100 p.st., and the profit

will be worth 30 p.st., that is to say, it will be worth that much in money instead of 20 p.st., as before. In the second eventuality, the capital of 100 p.st. will be worth only 50 p.st., and the profit will be represented by the value of 10 p.st. But in either case $150 : 30 = 50 : 10 = 100 : 20 = 20\%$. But in all these cases there would have been no actual change in the magnitude of capital-value, but only in the money-expression of the same value and the same surplus-value. For this reason $\frac{s}{C}$, or the rate of profit, could not be affected.

The second case is that in which an actual change of magnitude takes place in the value, but without being accompanied by a change in the proportion of v to c, in other words, when the rate of surplus-value remains the same and the proportion of the variable capital invested in labor-power (considered as an index of the amount of labor-power set in motion) to the constant capital invested in means of production remains the same. Under these circumstances, we may have C, or nC, or $\frac{C}{n}$, for instance 1,000, or 2,000, or 500. If the rate of profit is 20%, the profit will be 200 in the first case, 400 in the second, and 100 in the third. But $200 : 1{,}000 = 400 : 2{,}000 = 100 : 500 = 20\%$, that is to say the rate of profit remains unchanged, because the composition of capital remains the same and is not effected by its change of magnitude. An increase or decrease in the mass of profit shows therefore merely an increase or decrease in the magnitude of the invested capital.

In the first case, then, there is but seemingly a change in the magnitude of the employed capital, while in the second case there is an actual change of magnitude, but no change in the organic composition of the capital, that is to say, in the relative proportions of the variable and constant portions. With the exception of these two cases, a change in the magnitude of the employed capital is either the *result* of a preceding change of value in one of the components of capital, and therefore of a change in the relative magnitudes of these components (unless the surplus-value itself varies with the variable capital); or, this change of magnitude (for instance in the

case of enterprises on a large scale, the introduction of new machinery, etc.) is the *cause* of a change in the relative magnitudes of the organic components of capital. In all these cases, other circumstances remaining unchanged, a change in the magnitude of the employed capital must be accompanied simultaneously by a change in the rate of profit.

An increase in the rate of profit is always due to a relative or absolute increase of the surplus-value in proportion to its cost of production, for instance to the advanced total capital, or to a decrease in the difference between the rate of profit and the rate of surplus-value.

Fluctuations in the rate of profit, independently of changes in the organic components of capital, or of the absolute magnitude of the capital, may occur through a rise or fall of the value of the advanced capital, whether it be fixed or circulating, caused by a prolongation or reduction of the working time required for its reproduction, this change in the working time taking place independently of already existing capital. The value of every commodity, including the commodities of which capital consists, is determined, not by the necessary labor-time contained in it individually, but by the *social* labor-time necessary for its reproduction. This reproduction may take place under aggravating or under propitious circumstances, which differ from the conditions of original production. If it takes under altered conditions double the time, or half as much time, to reproduce the same material capital, and if the value of money remained unchanged, then a capital formerly worth 100 p.st. would be worth 200 p.st. or 50 p.st. If this appreciation or depreciation were to affect all parts of capital uniformly, then the profit would also be expressed correspondingly in double, or half, the amount of money. But if appreciation or depreciation imply a change in the organic composition of capital, if they imply a raising or lowering of the proportion between the variable and constant portions of capital, then the rate of profit, other circumstances remaining the same, will grow with a relatively growing, and fall with a relatively falling, variable capital. If only the

money-value of the advanced capital rises or falls (in consequence of a change in the valuation of money) then the money-value of the surplus-value rises or falls in the same proportion. The rate of profit remains unchanged.

PART II.

CONVERSION OF PROFIT INTO AVERAGE PROFIT.

CHAPTER VIII.

DIFFERENT COMPOSITION OF CAPITALS IN DIFFERENT LINES OF PRODUCTION AND RESULTING DIFFERENCES IN THE RATES OF PROFIT.

In the preceding part we demonstrated among other things that the rate of profit may vary, may rise or fall, while the rate of surplus-value remains the same. In the present chapter we assume that the intensity of exploitation, and therefore the rate of surplus-value and the length of the working day, are the same in all spheres of production into which the social labor of a certain country is divided. Adam Smith has already shown explicitly that many differences in the exploitation of labor in different spheres of production balance one another by many actual causes, or causes regarded as such by prevailing prejudices, so that they are mere evanescent distinctions and are of no moment in this calculation. Other differences, for instance those in the scale of wages, rest largely on the difference between simple and complicated labor, mentioned in the beginning of volume I, which do not affect the intensity of exploitation in the different spheres of production, although they render the conditions of the laborers in those spheres very unequal. For instance, if the labor of a goldsmith is paid better than that of a day-laborer, the surplus-labor of the goldsmith produces correspondingly more surplus-value than that of the day-laborer. And while the compensation of wages and working days, and thereby of the rates of surplus-value, between different spheres of production, or even different investments of capital in the same

sphere of production, is checked by many local obstacles, it is nevertheless accomplished at an increasing degree with the advance of capitalist production and the subordination of all economic conditions under this mode of production. The study of such frictions, while quite important for any special work on wages, may be dispensed with as being accidental and unessential in a general analysis of capitalist production. In such a general analysis it is always assumed that the actual conditions correspond to the terms used to express them, or, in other words, that actual conditions are represented only to the extent that they are typical of their own case.

The difference in the rates of surplus-value in different countries, and consequently in the degree of national exploitation of labor, is immaterial for our present analysis. For we desire to analyse precisely the way in which a general rate of profit is brought about in a certain country. It is evident, however, that a comparison of the various national rates of profit requires but a collation of previous analyses with that which is to follow. First consider the differences in the national rates of surplus-value, then compare on this basis the differences in the national rates of profit. Those differences which are not due to differences in the national rates of surplus-value, must be due to circumstances in which the surplus-value is assumed to be universally the same, constant, as it is in the analysis of this chapter.

We demonstrated in the preceding chapter that, assuming the rate of surplus-value to be constant, the rate of profit may rise or fall in consequence of circumstances which raise or lower the value of one or the other parts of constant capital, and so affect the proportion between the variable and constant components of capital in general. We observed, furthermore, that circumstances which prolong or reduce the time of turnover of a certain capital may also influence the rate of profit in a similar manner. Since the mass of profits is identical with the mass of surplus-value, the surplus-value itself, it was also seen that the *mass* of profits, in distinction from the *rate* of profits, was not touched by the aforementioned fluctuations of value. These fluctuations modified merely the rate through

which a certain surplus-value, and therefore a profit of a given magnitude, express themselves, in other words, they indicate the relative magnitude of surplus-value, or profits, as compared with the magnitude of the advanced capital. To the extent that capital was released or tied up by such fluctuations of value, it was not only the rate of profit, but the profit itself, which could be affected by this indirect route. However, this always applied only to such capital as was already engaged, not to new investments about to be made. Besides, the increase or reduction of profit always depended on the extent to which the same capital could set in motion more or less labor in consequence of such fluctuations of value, in other words, the extent to which the same capital, with the same rate of surplus-value, could obtain a larger or smaller amount of surplus-value. So far from contradicting the general rule, or being an exception from it, this seeming exception was really but a special case in the application of the general rule.

It was seen in the preceding part, that the rate of profit varied, when the degree of exploitation was constant while the value of the component parts of constant capital, and the time of turn-over of capital, changed. The obvious conclusion from this was that the rates of profit of different spheres of production existing simultaneously side by side had to differ, when, other circumstances remaining unchanged, the time of turn-over of the invested capitals differed, or when the proportions of the values of the organic components of these capitals were different in the different lines of production. That which we previously regarded as changes occurring successively in the same capital will now be considered as simultaneous differences of contemporaneous investments of capital in different spheres of production.

Under these circumstances we shall have to analyse: 1) The differences in the *organic composition* of capitals. 2) The differences in their times of turn-over.

The natural premise in this entire analysis is that, in speaking of the composition, or of the turn-over, of a capital in a certain line of production, we always mean the aver-

age normal proportions of the capital invested in this line, or, more generally, of the average of the total capital invested in this sphere, not of the temporary differences of the individual capitals in it.

Since our assumption is, furthermore, that the rate of surplus-value and the working day are constant, and since this assumption implies also the constancy of wages, it follows that a certain quantity of variable capital expresses a definite quantity of exploited labor-power and therefore a definite quantity of materialised labor. In other words, if 100 p.st. represent the weekly wages of 100 laborers, indicating 100 actual labor-powers, then n times 100 p.st. indicates the labor-powers of n times 100 laborers, and $\frac{100}{n}$ p.st. those of $\frac{100}{n}$ laborers. The variable capital serves here, as is always the case when the wages are given, as an index of the amount of labor set in motion by a definite total capital. Differences in the magnitude of the employed variable capitals serve, therefore, as indices of the differences in the amount of labor-power set in motion. If 100 p.st. indicate 100 laborers per week, representing 6,000 working hours, if the weekly working time is 60 hours, then 200 p.st. indicate 12,000, and 50 p.st. indicate 3,000 working hours.

By the composition of capital we mean, as we have stated in volume I, the proportions of its active and passive parts, of variable and constant capital. Two proportions require consideration under this heading. They are not equally important, although they may produce the same effects under certain circumstances.

The first proportion rests on a technical basis, and must be considered as existing at a certain stage of development of the productive forces. A definite quantity of labor-power, represented by a definite number of laborers, is required for the purpose of producing a definite quantity of products, for instance in one day, and thereby to consume productively, by setting in motion, a definite quantity of means of production, machinery, raw materials, etc. A definite number of laborers corresponds to a definite quantity of means of production, so that a definite quantity of living labor corresponds

to a definite quantity of materialised labor in means of production. This proportion differs a great deal in different spheres of production, and frequently even in different branches of one and the same industry. On the other hand, it may occasionally be entirely or approximately the same in widely separated lines of industry.

This proportion forms the technical composition of capital and is the primary basis of its organic composition.

However, it is possible that this first proportion may be the same in different lines of industry, provided that the variable capital is merely an index of labor-power, and the constant capital merely an index of the mass of means of production set in motion by the labor-power. For instance, certain work in copper and iron may be conditioned on the same proportional composition between labor-power and the mass of means of production. But since copper is more expensive than iron, the proportion of value between variable and constant capital may be different in either case, and then the composition of the value of the total capitals is, of course, likewise different. The difference between the technical composition and the composition of values is manifested by each branch of industry by the fact that the proportion of the values of the two parts of capital may vary while the technical composition is constant, and the proportion of values may remain the same while the technical composition varies. This last eventuality will, of course, be possible only if the change in the proportion of the employed masses of means of production and labor-power is compensated by an opposite change in their values.

The composition of the values of capital, which is determined by, and reflects, its technical composition, is called the *organic* composition of capital.[20]

We assume, then, that the variable capital is the index of a definite quantity of laborers, or of labor-power, or a definite quantity of living labor set in motion. We saw in the preced-

[20] The above is briefly developed in the third edition of volume I, in the beginning of chapter XXV. Since the two first editions did not contain this passage, it was so much more necessary to repeat it at this place.— F. E.

ing part that a change in the magnitude of the value of variable capital might eventually indicate nothing but a higher or lower price of the same mass of labor. But here, where the rate of surplus-value and the working day have been assumed to be constant, and the wages for a definite working time are given, this is out of the question. On the other hand, a difference in the magnitude of the constant capital may likewise be an index of a change in the mass of means of production set in motion by a definite quantity of labor-power. Still, it may also be due to a difference in value between the means of production set in motion in one sphere and those of another. Both points of view must be considered here.

Finally, the following essential facts must be taken into account:

Take it that 100 p.st. are the weekly wages of 100 laborers. Take it that the working hours are 60 per week. Take it, furthermore, that the rate of surplus-value is 100%. In that case, the laborers work 30 of the 60 hours for themselves, and 30 hours gratis for the capitalist. In fact, those 100 p.st. of wages represent only 30 working hours of those 100 laborers, or a total of 3,000 working hours, while the other 3,000 hours worked by the laborers are incorporated in the 100 p.st. of surplus-value, or as profit, pocketed by the capitalist. Although the wages of 100 p.st. do not express the value in which the weekly labor of those 100 laborers is materialised, still they indicate (since the length of the working day and the rate of surplus-value are given) that this capital set in motion 100 laborers for 6,000 working hours. The capital of 100 p.st. indicates this, first, because it indicates the number of laborers set in motion, since one pound sterling stands for one laborer per week, and 100 p.st. for 100 laborers per week; and in the second place, because every laborer set in motion performs twice the work for which his wages pay, at the given rate of surplus-value of 100%, so that one pound sterling, his wages, the expression of half a week of labor, actually set in motion one whole week's labor, and in the same way 100 p.st., although they pay only for 50 weeks of labor, set in motion 100 weeks of labor. There is, then, an essen-

tial difference between variable capital so far as its value, invested as a wages-capital, represents a certain sum of wages, a definite quantity of materialised labor, and variable capital so far as its value is a mere index of the quantity of living labor set in motion by it. This last-named labor is always greater than that incorporated in the variable capital, and is, therefore, represented by a greater value than that of the variable capital. This greater value is determined on one hand by the number of laborers set in motion by the variable capital, and on the other by the quantity of surplus-labor performed by them.

This mode of looking upon variable capital leads to the following conclusions:

When a capital invested in the sphere of production A expends only 100 in variable capital for each 700 of total capital, leaving 600 for constant capital, while a capital invested in the sphere of production B expends 600 for variable and only 100 for constant capital, then the capital of 700 in A will set in motion only 100 of labor-power, or, in terms of our previous assumption, 100 weeks of labor, or 6,000 hours of living labor, while the same amount of capital in B will set in motion 600 weeks of labor or 36,000 hours of living labor. The capital in A would then appropriate only 50 weeks of labor, or 3,000 hours of surplus-labor, while the same amount of capital in B would appropriate 300 weeks of labor, or 18,000 hours. The variable capital is the index, not only of the labor embodied in it, but also, when the rate of surplus-value is known, of the labor set in motion over and above that embodied in itself, in other words, of the surplus-labor. With the same intensity of exploitation, the profit in the first case would be $\frac{100}{700}$, or $\frac{1}{7}$, or $14\frac{2}{7}\%$, and in the second case $\frac{600}{700}$, or $\frac{6}{7}$, or $85\frac{5}{7}\%$, six times the rate of profit of the first. In this case, the profit itself would actually be six times that of A, 600 in B as against 100 in A, because the same capital set in motion six times the quantity of living labor, which, with the same degree of exploitation, means six times as much surplus-value and thus six times as much profit.

If the capital invested in A were not 700, but 7,000 p.st., while that invested in B were only 700 p.st., and the organic composition of both were to remain the same, then the capital in A would expend 1,000 p.st. of the 7,000 as variable capital, that is to say, it would employ 1,000 laborers per week at 60,000 hours of living labor, of which 30,000 would be surplus-labor. But yet each 700 p.st. of the capital in A would continue to set in motion only one-sixth of the surplus-labor of the capital in B, and produce only one-sixth of the profit of this capital. If we consider the rate of profit, then $\frac{1000}{7000}$, or $\frac{100}{700}$, or $14\frac{2}{7}\%$, would be the rate of the capital in A, compared with $\frac{600}{700}$, or $85\frac{5}{7}\%$, of the capital in B. Taking equal amounts of capital for comparison, the rates of profit differ here, because the masses of surplus-value, and thus of profits, differ, although the rates of surplus-value are the same, owing to the different masses of living labor set in motion.

The same result follows, if the technical conditions are the same in both spheres of production, while the value of the elements of constant capital is greater or smaller in the one than in the other. Let us assume that both invest 100 p.st. in variable capital and employ 100 laborers per week, which set in motion the same quantity of machinery and raw materials. But let the last-named elements of production be more expensive in B than in A. For instance, let the 100 p.st. of variable capital in A set in motion 200 p.st. of constant capital, and in B 400 p.st. of constant capital. With the same rate of surplus-value, 100%, the surplus-value produced is in either case 100 p.st. Hence the profit is also 100 p.st. But the rate of profit in A is $\frac{100}{200_c\ 100_v}$, or $\frac{1}{3}$, or $33\frac{1}{3}\%$, while in B it is $\frac{100}{400_c\ 100_v}$, or $\frac{1}{5}$, or 20%. In fact, if we select a certain aliquot part of the total capital from either side, we find that every 100 p.st. in B sets aside only 20 p.st., or one-fifth, for variable capital, while every 100 p.st. in A sets aside $33\frac{1}{3}\%$ p.st., or one-third, for this purpose. B produces less profit to each 100 p.st., because it sets in motion less living labor than A. The differ-

ence in the rates of profits resolves itself once more, in this case, into a difference of the masses of surplus-value, and thus masses of profit, produced per each 100 of capital invested.

The difference of this second example from the first is just this: The compensation between A and B, in the second case, would require only a change in the value of the constant capital of either A or B, provided the technical basis remained the same. But in the first case, the technical basis itself is different, and would have to be revolutionised in order to consummate a compensation.

The different organic composition of various capitals, then, is independent of their absolute magnitude. It is always but a question of what part of every 100 is variable and what part constant.

Capitals of different magnitude, calculated in percentages, or, what amounts to the same in this case, capitals of the same magnitude, working with the same working time and the same degree of exploitation, may produce considerably different amounts of surplus-value, and thus of profit, for the reason that a difference in the organic composition of capital in different spheres of production implies a difference in their variable parts, and thus a difference in the quantities of living labor set in motion by them, which implies a difference in the quantities of surplus-labor appropriated by them. And this surplus-labor is the substance of surplus-value and of profit. Equal portions of the total capital in the various spheres of production comprise the sources of unequal portions of surplus-value, and the only source of surplus-value is living labor. With the same degree of labor-exploitation the mass of labor set in motion by a capital of 100, and consequently the mass of surplus-value appropriated by it, depend on the magnitude of its variable component. If a capital, consisting of percentages of 90 c + 10 v, produced as much surplus-value, or profit, with the same degree of exploitation, as a capital consisting of percentages of 10 c + 90 v, then it would be as plain as daylight that the surplus-value, and value in general, must have an entirely different source than labor, and that political economy would then be without

a rational basis. If we assume continually that one pound sterling stands for the weekly wages of a laborer working 60 hours, and that the rate of surplus-value is 100%, then it is evident that the total product in values which one laborer can supply in one week, is 2 p.st. Then 10 laborers cannot supply more than 20 p.st. And since 10 p.st. of the 20 reproduce the wages, those 10 laborers cannot produce any more surplus-value than 10 p.st. On the other hand the 90 laborers, whose total product is 180 p.st., and whose wages amount to 90 p.st., produce a surplus-value of 90 p.st. The rate of profit in the one case would be 10%, in the other 90%. If matters were different, then value and surplus-value would be something else than materialised labor. Seeing, then, that capitals in different spheres of production, calculated in percentages — or capitals of equal magnitude — are differently divided into variable and constant capital, so that they set in motion unequal quantities of living labor and produce different surplus-values, and profits, it follows that the rate of profit, which consists precisely of the calculation of the percentage of surplus-value on the total capital, must also differ.

Now, if capitals in different spheres of production, calculated in percentages, in other words, capitals of equal magnitude, produce unequal profits in different spheres of production, in consequence of their different organic composition, then it follows that the profits of unequal capitals in different spheres of production cannot be proportional to the magnitude of their respective capitals, or, in slightly different words, profits in different spheres of production are not proportional to the magnitude of the respective capitals invested in them. For if profits were to grow at the rate of the investment of capital, it would mean that the percentage of profits was the same, so that capitals of equal magnitude in different spheres of production would have equal rates of profit, in spite of their different organic composition. Only within the same sphere of production, in which the organic composition of capital is known, or in different spheres of production with the same organic composition of capitals, do the masses of profits stand in direct ratio to the masses of capitals invested.

To say that the profits of capitals of different magnitude are proportional to their magnitudes is only another way of saying that capitals of equal magnitude yield equal profits, or that the rate of profits is the same for all capitals, whatever may be their organic composition and their magnitude.

These statements hold good on the assumption that the commodities are sold at their values. The value of a commodity is equal to the value of the constant capital contained in it, plus the value of the variable capital reproduced in it, plus the increment of this variable capital, which increment is the surplus-value. With the same rate of surplus-value, its mass evidently depends on the mass of the variable capital. The value of the product of a capital of 100 is in the one case 90 c + 10 v + 10 s, or 110, in the other 10 c + 90 v + 90 s, or 190. If the commodities are sold at their values, then the first product is sold at 110, of which 10 represent surplus-value, or unpaid labor; the second product is sold at 190, of which 90 represent surplus-value, or unpaid labor.

This is especially important when international rates of profit are compared with one another. Let us assume that the rate of surplus-value in some European country is 100%, so that the laborer works one-half of the working day for himself and the other half for his employer. Let us assume, furthermore, that the rate of profit in some Asiatic country is 25%, so that the laborer works four-fifths of the working day for himself, and one-fifth for his employer. Let the composition of the national capital in the European country be 84 c + 16 v, that of the national capital of the Asiatic country, where little machinery, etc., is used, and a given quantity of labor power consumes relatively little raw material productively in a given time, 16 c + 84 v. Then we have the following calculation:

In the European country: Value of product 84 c + 16 v + 16 s, or 116; rate of profit $\frac{16}{100}$, or 16%.

In the Asiatic country: Value of product 16 c + 84 v + 21 s, or 121; rate of profit $\frac{21}{100}$, or 21%.

The rate of profit in the Asiatic country is higher by more than 25% than in the European country, although the rate

of surplus-value is four times smaller in the former than in the latter. Men like Carey, Bastiat, and others, would come to the opposite conclusion.

By the way, different national rates of profit will generally be based on different national rates of surplus-value. But we compare in this chapter unequal rates of profit resting on the same rate of surplus-value.

Aside from differences of organic composition of capitals, which imply different masses of labor, and consequently, other circumstances remaining the same, of surplus-labor, which set in motion capitals of the same magnitude in different spheres of production, there is still another source for the inequality of rates of profit. This is the different length of the time of turn-over of capital in different spheres of production. We have seen in chapter IV that, other circumstances being the same, the rates of profits of capitals of the same organic composition are proportioned inversely as their times of turn-over. We have also seen that the same variable capital, if turned over in different periods of time, produces unequal masses of annual surplus-value. The difference of the times of turn-over, then, is another reason why capitals of the same magnitude in different spheres of production do not produce equal profits in equal times, and why the rates of profit in these different spheres differ.

On the other hand, the proportional composition of capitals as to fixed and circulating capital does not in itself affect the rate of profit. It can affect this rate only in the case that this difference in composition either coincides with a different proportion of the variable and constant parts so that the difference in the rate of profit is due to this difference in organic composition, and not to the different proportions between fixed and circulating capital; or, if the difference in the proportion of fixed and circulating capital is responsible for a difference in the time of turn-over, during which a certain profit is realised. If capitals are divided into fixed and circulating capital in different proportions, it will, of course, always have an influence on the time of turn-over and cause differences in it. But this does not imply that the time of

turn-over, in which the same capitals realise certain profits, is different. For instance, A may have to convert the greater part of its product continually into raw materials, etc., while B may use the same machinery, etc., for a longer time, and need less raw material, but both A and B have a part of their capital engaged so long as they are producing; the one in raw materials, that is to say circulating capital, the other in machinery, etc., or fixed capital. The capitalist in A continually converts a portion of his capital from commodities into money, and this into raw materials, while the capitalist in B employs a portion of his capital for a longer time as an instrument of labor without any such conversions. If b th of them employ the same amount of labor, they will sell masses of products of unequal value during the year, but both masses of products will contain the same amount of surplus-value, and their rates of profit, calculated on the entire capital invested, will be the same, although their proportional composition of fixed and circulating capital, and their times of turn-over, are different. Both capitals realise equal profits in equal times, although they are turned over in different periods of time.[21] The difference in the time of turn-over has in itself no importance except so far as it affects the mass of surplus-value which may be appropriated and realized by the same capital in a certain time. Seeing that a different distribution of the fixed and circulating capital of A and B does not necessarily imply a different time of turn-over, which would in its turn imply a different rate of profit, it is evident, if there is such a difference in the rates of profit of A and B, that it is not due to a difference in the proportions of

[21] It follows from chapter IV that the above statement is correct only in the case that the capitals of A and B are differently composed so far as their values are concerned, but that the percentages of their variable capitals are proportioned as their times of turn-over, or inversely as their numbers of turn-over. Let capital A have the following percentages of composition: 20 c fixed and 70 c circulating, a total of 90 c, so that the total capital is 90 c + 10 v, or 100. At a rate or surplus value of 100% the 10 v produce in one turn-over 10 s, making the rate of profit for one turn-over 10%. Let capital B have the composition 60 C fixed and 20c circulating, so that we have 80 c + 20 v, or 100. The 20 v produce in one turn-over, at the above rate of surplus-value, 20 s , making the rate of profit for one turn-over 20%, which is double that of A. But if A is turned over twice per year, and B only once, then 2×10 also make 20 per year, and the annual rate of profit is the same for both, namely 20%.— F. E.

fixed and circulating capital as such, but rather to the fact that these different proportions indicate an inequality in the times of turn-over affecting the rates of profit.

It follows, then, that a difference in the composition of capitals in various lines of production, referring to their fixed and circulating portions, has in itself no bearing on the rate of profit, since it is the proportion between the constant and variable capital which decides this question, and since the value of the constant capital, and its relative magnitude as compared to that of the variable, is quite independent of the fixed or circulating nature of its components. But it will be found — and this is one of the causes of wrong conclusions — that whenever fixed capital is considerably developed, it is but an expression of the fact that production is carried on at a large scale, so that the constant capital far outweighs the variable, or the living labor-power employed is trifling compared to the mass of the means of production set in motion by it.

We have demonstrated, that different lines of industry may have different rates of profit, corresponding to differences in the organic composition of capitals, and, within the limits indicated, also corresponding to different times of turn-over; the law (as a general tendency) that profits are proportioned as the magnitudes of the capitals, or that capitals of equal magnitude yield equal profits in equal times, applies only to capitals of the same organic composition, with the same rate of surplus-value, and the same time of turn-over. And these statements hold good on the assumption, which has been the basis of all our analyses so far, namely that the commodities are sold at their values. On the other hand there is no doubt that, aside from unessential, accidental, and mutually compensating distinctions, a difference in the average rate of profit of the various lines of industry does not exist in reality, and could not exist without abolishing the entire system of capitalist production. It would seem, then, as though the theory of value were irreconcilable at this point with the actual process, irreconcilable with the real phenomena of pro-

duction, so that we should have to give up the attempt to understand these phenomena.

It follows from the first part of this volume that the cost-prices are the same for the products of different spheres of production, in which equal portions of capital have been invested for purposes of production, regardless of the organic composition of such capitals. The cost-price does not show the distinction between variable and constant capital to the capitalist. A commodity for which he must advance 100 p.st. in production cost him the same amount, whether he invests 90 c + 10 v, or 10 c + 90 v. He always spends 100 p.st. for it, no more, no less. The cost-prices are the same for investments of the same amounts of capital in different spheres, no matter how much the produced values and surplus-values may differ. The equality of cost-prices is the basis for the competition of the invested capitals, by which an average rate of profit is brought about.

CHAPTER IX.

FORMATION OF A GENERAL RATE OF PROFIT (AVERAGE RATE OF PROFIT) AND TRANSFORMATION OF THE VALUES OF COMMODITIES INTO PRICES OF PRODUCTION

The organic composition of capital depends at each stage on two circumstances: First, on the technical relation of the employed labor-power to the mass of the employed means of production; secondly, on the price of these means of production. We have seen that this composition must be considered according to its percentages. We express the organic composition of a certain capital, consisting of four-fifths of constant, and one-fifth of variable capital, by the formula 80 c + 20 v. We furthermore assume in this comparison that the rate of surplus-value is unchangeable. Let it be, for instance, 100%. The capital of 80 c + 20 v then produces a surplus-value of 20 s, and this is equal to a rate of profit of 20% on the total capital. The magnitude of the actual value

of the product of this capital depends on the magnitude of the fixed part of the constant capital, and on the amount of it passing by wear and tear over to the product. But as this circumstance is immaterial so far as the rate of profit and the present analysis are concerned, we assume for the sake of simplicity that the constant capital is transferred everywhere uniformly and entirely to the annual product of the capitals named. It is further assumed that these capitals realise equal quantities of surplus-value in the different spheres of production, proportional to the magnitude of their variable parts. In other words, we disregard for the present the difference which may be produced in this respect by the different lengths of the periods of turn-over. This point will be discussed later.

Let us compare five different spheres of production, and let the capital in each one have a different organic composition, as follows:

Capitals	Rate of Surplus Value	Surplus Value	Value of Product	Rate of Profit
I. 80 c 20 v	100%	20	120	20%
II. 70 c 30 v	100%	30	130	30%
III. 60 c 40 v	100%	40	140	40%
IV. 85 c 15 v	100%	15	115	15%
V. 95 c 5 v	100%	5	105	5%

Here we have considerably different rates of profit in different spheres of production with the same degree of exploitation, corresponding to the different organic composition of these capitals.

The grand total of the capitals invested in these five spheres of production is 500; the grand total of the surplus-value produced by them is 110; the total value of all commodities produced by them is 610. If we consider the amount of 500 as one single capital, and capitals I to V as its component parts (about analogous to the different departments of a cotton mill which has different proportions of constant and variable capital in its carding, preparatory spinning, spinning, and weaving rooms, on the basis of which the average proportion for the whole factory is calculated), then we should put down the average composition of this capital of

500 as 390 c + 110 v, or, in percentages, as 78 c + 22 v. In other words, if we regard each one of the capitals of 100 as one-fifth of the total capital, its average composition would be 78 c + 22 v; and every 100 would make an average surplus-value of 22. The average rate of profit would, therefore, be 22%, and, finally, the price of every fifth of the total product produced by the capital of 500 would be 122. The product of each 100 of the advanced total capital would have to be sold, then, at 122.

But in order not to arrive at entirely wrong conclusions, it is necessary to assume that not all cost-prices are equal to 100.

With a composition of 80 c + 20 v, and a rate of surplus-value of 100, the total value of the commodities produced by the first capital of 100 would be 80 c + 20 v + 20 s, or 120, provided that the whole constant capital is tranferred to the product of the year. Now, this may happen under certain circumstances in some spheres of production. But it will hardly be the case where the proportion of c to v is that of four to one. We must, therefore, remember in comparing the values produced by each 100 of the different capitals, that they will differ according to the different composition of c as to fixed and circulating parts, and that the fixed portions of different capitals will wear out more or less rapidly, thus transferring unequal quantities of value to the product in equal periods of time. But this is immaterial so far as the rate of profit is concerned. Whether the 80 c transfer the value of 80, or 50, or 5, to the annual product, whether the annual product is consequently 80 c + 20 v + 20 s = 120, or 50 c + 20 v + 20 s = 90, or 5 c + 20 v + 20 s = 45, in all of these cases the excess of the value of the product over its cost-price is 20, and in every case these 20 are calculated on a capital of 100 in ascertaining the rate of profit. The rate of profit of capital I is, therefore, in every case 20%. In order to make this still plainer, we transfer in the following table different portions of the constant capital of the same five capitals to the value of their product.

Now, if we consider capitals I to V once more as one single total capital, it will be seen that also in this case the compo-

Capitals	Rate of Surplus Value	Surplus Value	Rate of Profit	Used Up c	Value of Commodities	Cost Price	
I. 80 c + 20 v	100%	20	20%	50	90	70	
II. 70 c + 30 v	100%	30	30%	51	111	81	
III. 60 c + 40 v	100%	40	40%	51	131	91	
IV. 85 c + 15 v	100%	15	15%	40	70	55	
V. 95 c + 5 v	100%	5	5%	10	20	15	
390 c + 110 v		110	100%				Total
78 c + 22 v		22	22%				Average

sition of the sums of these five capitals amounts to 500, being 390c + 110 v, so that the average composition is once more 78 c + 22 v. The average surplus-value also remains 22%. If we allot this surplus-value uniformly to capitals I to V, we arrive at the following prices of the commodities:

Capitals	Surplus Value	Value	CostPrice of commodities	Price of Commodities	Rate of Profit	Deviation of Price From Value
I. 80 c + 20 v	20	90	70	92	22%	+ 2
II. 70 c + 30 v	30	111	81	103	22%	− 8
III. 60 c + 40 v	40	131	91	113	22%	− 18
IV. 85 c + 15 v	15	70	55	77	22%	+ 7
V. 95 c + 5 v	5	20	15	37	22%	+ 17

Summing up, we find that the commodities are sold at 2 + 7 + 17 = 26 above, and 8 + 18 = 26 below their value, so that the deviations of prices from values mutually balance one another by the uniform distribution of the surplus-value, or by the addition of the average profit of 22 per 100 of advanced capital to the respective cost-prices of the commodities of I to V. One portion of the commodities is sold in the same proportion above in which the other is sold below their values. And it is only their sale at such prices which makes it possible that the rate of profit for all five capitals is uniformly 22%, without regard to the organic composition of these capitals. The prices which arise by drawing the average of the various rates of profit in the different spheres of production and adding this average to the cost-prices of the different spheres of production, are the *prices of production*. They are conditioned on the existence of an average rate of profit, and this, again, rests on the premise that the rates of profit in every sphere of production, considered by itself, have previously been reduced to so many average rates of profit.

These special rates of profit are equal to $\frac{s}{C}$ in every sphere of production, and they must be deduced out of the values of the commodities, as shown in volume I. Without such a deduction an average rate of profit (and consequently a price of production of commodities), remains a vague and senseless conception. The price of production of a commodity, then, is equal to its cost-price plus a percentage of profit apportioned according to the average rate of profit, or in other words, equal to its cost-price plus the average profit.

Since the capitals invested in the various lines of production are of a different organic composition, and since the different percentages of the variable portions of these total capitals set in motion very different quantities of labor, it follows that these capitals appropriate very different quantities of surplus-labor, or produce very different quantities of surplus-value. Consequently the rates of profit prevailing in the various lines of production are originally very different. These different rates of profit are equalised by means of competition into a general rate of profit, which is the average of all these special rates of profit. The profit allotted according to this average rate of profit to any capital, whatever may be its organic composition, is called the average profit. That price of any commodity which is equal to its cost-price plus that share of average profit on the total capital invested (not merely consumed) in its production which is allotted to it in proportion to its conditions of turn-over, is called its price of production. Take, for instance, a capital of 500, of which 100 are fixed capital, and let 10% of this wear out during one turn-over of the circulating capital of 400. Let the average profit for the time of this turn-over be 10%. In that case the cost-price of the product created during this turn-over will be 10 c (wear) + 400 (c + v), circulating capital, or a total of 410, and its price of production will be 410 (cost-price) plus 10% of average profit on 500, or a total of 460.

While the capitalists in the various spheres of production recover the value of the capital consumed in the production of their commodities through the sale of these, they do not secure the surplus-value, and consequently the profit, created

in their own sphere by the production of these commodities, but only as much surplus-value, and profit, as falls to the share of every aliquot part of the total social capital out of the total social surplus-value, or social profit produced by the total capital of society in all spheres of production. Every 100 of any invested capital, whatever may be its organic composition, draws as much profit during one year, or any other period of time, as falls to the share of every 100 of the total social capital during the same period. The various capitalists, so far as profits are concerned, are so many stockholders in a stock company in which the shares of profit are uniformly divided for every 100 shares of capital, so that profits differ in the case of the individual capitalists only according to the amount of capital invested by each one of them in the social enterprise, according to his investment in social production as a whole, according to his shares. That portion of the price of commodities which buys back the elements of capital consumed in the production of these commodities, in other words, their cost-price, depends on the investment of capital required in each particular sphere of production. But the other element of the price of commodities, the percentage of profit added to this cost-price, does not depend on the mass of profit produced by a certain capital during a definite time in its own sphere of production, but on the mass of profit allotted for any period to each individual capital in its capacity as an aliquot part of the total social capital invested in social production.[22]

A capitalist selling his commodities at their price of production recovers money in proportion to the value of the capital consumed in their production and secures profits in proportion to the aliquot part which his capital represents in the total social capital. His cost-prices are specific. But the profit added to his cost-prices is independent of his particular sphere of production, for it is a simple average per 100 of invested capital.

Let us assume that the five different investments of capital named I to V in the foregoing illustrations belong to one

[22] Cherbuliez.

man. The quantity of variable and constant capital consumed for each 100 of the invested capitals in the production of commodities would be known, and these portions of the value of the commodities of I to V would make up a part of their price, since at least this price is required to recover the consumed portions of the invested capital. These cost-prices would be different for each class of the commodities I to V, and the owner would therefore mark them differently. But the different masses of surplus-value, or profit, produced by capitals I to V might easily be regarded by the capitalist as profits of his aggregate capital, so that each 100 would get its proportional quota. The cost-prices of the commodities produced in the various departments I to V would be different; but that portion of their selling price which comes from the addition of the profit for each 100 of capital would be the same for all these commodities. The aggregate price of the commodities of I to V would be equal to their aggregate value, that is to say, it would be equal to the sum of the cost-prices of I to V plus the sum of the surplus-values, or profits, produced in I to V. It would actually be the money-expression of the total quantity of past and present labor incorporated in the commodities of I to V. And in the same way the sum of all the prices of production of all commodities in society, comprising the totality of all lines of production, is equal to the sum of all their values.

This statement seems to be contradicted by the fact that under capitalist production the elements of productive capital are, as a rule, bought on the market, so that their prices include profits which have already been realised. Accordingly, the price of production of one line of production passes, with the profit contained in it, over into the cost-price of another line of production. But if we place the sum of the cost-prices of the whole country on one side, and the sum of its surplus-values, or profits, on the other, it is evident that the calculation must come out right. For instance, take a certain commodity A. Its cost-price may contain the profits of B, C, D, etc., or the cost-prices of B, C, D, etc., may contain the profits of A. Now, if we make our calculation, the

profits of A will not be included in its cost-price, nor will the profits of B, C, D, etc., be figured in with their own cost-prices. No one figures his own profit in his own cost-price. If there are *n* spheres of production, and every one of them makes a profit of p, then the aggregate cost-price of all of them is equal to $k - np$. Taking the calculation as a whole we see that the profits of one sphere which pass into the cost-prices of another have been placed on one side of the account showing the total price of the ultimate product, and so cannot be placed a second time on the profit side. If any do appear on this side, it can be only because this particular commodity was itself the ultimate product, so that its price of production did not pass into the cost-price of some other commodity.

If an amount equal to p, expressing the profits of the producers of means of production, passes into the cost-price of a commodity, and if a profit equal to p' is added to this cost-price, then the aggregate profit P is equal to $p + p'$. The aggregate cost-price of a commodity, after deducting all amounts for profit, is in that case its own cost-price minus P. If this cost-price is called k, then it is evident that $k + P = k + p + p'$. We have seen in volume I, chapter IX, 2, that the product of every capital may be treated as though a part of it reproduced only capital, while the other part represented only surplus-value. Applying this mode of calculation to the aggregate product of society, it is necessary to make some rectifications. For, looking upon society as a whole, it would be a mistake to figure, say, the profit contained in the price of flax twice. It should not be counted as a portion of the price of linen and at the same time as the profit of the producers of flax.

To the extent that the surplus-value of A passes into the constant capital of B, there is no difference between surplus-value and profit. It is quite immaterial for the value of the commodities, whether the labor contained in them is paid or unpaid. We see merely that B pays for the surplus-value of A. But the surplus-value of A cannot be counted twice in the total calculation.

The essential difference is this: Aside from the fact that

the price of a certain product, for instance the product of capital B, differs from its value, because the surplus-value realized in B may be greater or smaller than the profit of others contained in the product of B, the same fact applies also to those commodities which form the constant part of its capital, and which indirectly, as necessities of life for the laborers, form its variable part. So far as the constant part is concerned, it is itself equal to the cost-price plus surplus-value, which now means cost-price plus profit, and this profit may again be greater or smaller than the surplus-value in whose place it stands. And so far as the variable capital is concerned, it is true that the average daily wage is equal to the values produced by the laborers in the time which they must work in order to produce their necessities of life. But this time is in its turn modified by the deviation of the prices of production of the necessities of life from their values. However, this always amounts in the end to saying that one commodity receives too little of the surplus-value while another receives too much, so that the deviations from the value shown by the prices of production mutually compensate one another. In short, under capitalist production, the general law of value enforces itself merely as the prevailing tendency, in a very complicated and approximate manner, as a never ascertainable average of ceaseless fluctuations.

Since the average rate of profit is formed by the average of the various rates of profit for each 100 of the invested capital during a definite period of time, say one year, it follows that the difference brought about by the various periods of turn overs of different capitals is also effaced by this means. But these differences play a leading role in the different rates of profit of the various spheres of production whose average forms the average rate of profit.

In the preceding illustration we assumed each capital in every sphere of production helping to make up the average rate of profit to be equal to 100, and we did so in order to show the differences in the rates of profit by percentages and incidentally the difference in the values of commodities produced by equal amounts of capital. But it is understood that

the actual masses of surplus-value produced in each sphere of production depend on the magnitude of the invested capitals, since the composition of each capital is determined by each sphere of production. But the particular rate of profit of any individual sphere of production is not affected by the circumstance that a capital of 100, or m times 100, or xm times 100 may be invested. The rate of profit remains 10%, whether the total profit is as 10 to 100, or 1,000 to 10,000.

However, since the rates of profit differ in the various spheres of production, seeing that considerably different masses of surplus-value, or profit, are produced in them according to the proportion of the variable to the total capital, it is evident that the average profit per 100 of the social capital, and consequently the average, or general, rate of profit, will differ considerably according to the respective magnitudes of the capitals invested in the various spheres. Take, for instance, four capitals A, B, C, D. Let the rate of surplus-value be 100% for all of them. Let the variable capital for each 100 of total capital be 25 in A, 40 in B, 15 in C, and 10 in D. In that case every 100 of the total capital would make a surplus-value, or profit, of 25 in A, 40 in B, 15 in C, and 10 in D. This would make a total of 90, and if these four capitals are of the same magnitude, the average rate of profit would be $\frac{90}{4}$, or 22.5%.

Now take it that the amounts of the total capitals are as follows: A equals 200, B, 300, C, 1,000, D, 4,000. The profits produced in that case would be 50, 120, 150, and 400. Lumping these four capitals together into one total capital of 5,500, its profit would be 720, and its average rate of profit $13\frac{1}{11}$%.

The masses of the total value produced differ according to the magnitudes of the total capitals invested in A, B, C, D, respectively. The question of the formation of an average rate of profit is therefore not merely a matter of drawing simply the average of the different rates of profit in the various spheres of production, but quite as much one of the relative weight which these different rates of profit carry in the formation of the average. This depends on the relative mag-

nitude of the capital invested in each particular sphere, or on the aliquot part which the capital invested in each particular sphere forms in the aggregate social capital. There will naturally be a very great difference according to whether a large or a small part of the total capital yields more or less of a rate of profit. And this, again, depends on the fact whether much or little capital is invested in those spheres in which the variable capital is relatively small or large compared to the total capital. It is the same with the average interest which a usurer draws who lends different amounts of capital at different rates of interest; for instance at 4, 5, 6, 7%, etc. The average rate of his interest will depend entirely on the relative magnitudes of the various capitals put out by him at different rates of interest.

We see, then, that the average rate of profit is determined by two factors:

1) By the organic composition of the capitals in the different spheres of production, and consequently by the different rates of profit of the individual spheres.

2) By the allotment of the social total capital to these different spheres, in other words, by the relative magnitude of the capitals invested in each particular sphere and the special rate of profit attendant to it; or, to express it still differently, by the relative share of the total social capital absorbed by each sphere of production.

In volumes I and II we were dealing only with the *values* of the commodities. Now we have dissected this value on the one hand into a *cost-price*, and on the other we have developed out of it another form, that of the *price of production* of commodities.

Take it that the composition of the average social capital is 80 c + 20 v, and that the annual rate of surplus-value, s′, is 100%. In that case the average annual profit for a capital of 100 would be 20, and the average annual rate of profit 20%. Whatever may be the cost-price k of the commodities annually produced by a capital of 100, their price of production will be k + 20. In those spheres of production, in which the composition of capital would be (80 — x) c +

(20 + x) V, the actually produced surplus-value, or the annual profit produced in this sphere, would be 20 + x, that is to say greater than 20, and the value of the produced commodities k + 20 + x, that is to say greater than k + 20, greater than their price of production. On the other hand, in those spheres, in which the composition of the capital would be (80 + x) c + (20 — x) v, the annually produced surplus-value, or profit, would be 20 — x, or smaller than 20, and consequently the value of the commodities k + 20 — x, smaller than the price of production, which is k + 20. Aside from eventual differences in the periods of turn-over, the price of production of the commodities would be equal with their value only in those spheres, in which the composition would happen to be 80 c + 20 v.

The specific development of the social productivity of labor varies more or less in each particular sphere of production in proportion as the quantity of means of production set in motion in a given working day by a given number of laborers is large, and consequently the quantity of labor required for a definite quantity of means of production small. Hence we call *capitals of higher composition* such capitals as contain a larger percentage of constant and a smaller percentage of variable capital than the average social capital; and vice versa, *capitals of lower composition* those capitals which give relatively more room to the variable, and relatively less to the constant capital, than the average social capital. Finally, we call *capitals of average composition* those capitals which have the same composition as the average social capital. If the average social capital is composed of 80 c + 20 v, then a capital of 90 c + 10 v stands above, and a capital of 70 c + 30 v below the social average. Generally speaking, if the composition of the average social capital is mc + nv, m and n being constant magnitudes and m + n being equal to 100, the formula (m + x) c + (n — x) v represents the higher composition, and (m — x) c + (n + x) v the lower composition, of some individual capital or group of capitals. The following tabulation shows the way in which these capitals perform their functions after an average rate of profit has been

established, assuming one turn-over per year. In this tabulation, I shows the average composition, in which the average rate of profit is 20%.

I). 80 c + 20 v + 20 s. Rate of profit 20%. Price of product 120. Value of product 120.

II). 90 c + 10 v + 10 s. Rate of profit 20%. Price of product 120. Value of product 110.

III). 70 c + 30 v + 30 s. Rate of profit 20%. Price of product 120. Value of product 130.

The value of the commodities produced by capital II would, therefore, be smaller than their price of production, while the price of production of the commodities of III would be smaller than their value. Value and price of production would be equal only in the case of capital I and others like it in the various lines of production. By the way, in applying these terms to any particular cases it must be borne in mind whether a deviation of the proportion between c and v is not due simply to a change in the value of the elements of constant capital, instead of a difference in the technical composition.

The foregoing statements are indeed a modification of our original assumption concerning the determination of the cost-price of commodities. We had originally assumed that the cost-price of a commodity is equal to the value of the commodities consumed in its production. Now, the price of production of a certain commodity is its cost-price for the buyer, and this price may pass into other commodities and become an element of their prices. Since the price of production may vary from the value of a commodity, it follows that the cost-price of a commodity containing this price of production may also stand above or below that portion of its total value which is formed by the value of the means of production consumed by it. It is necessary to remember this modified significance of the cost-price, and to bear in mind that there is always the possibility of an error, if we assume that the cost-price of the commodities of any particular sphere is equal to the value of the means of production consumed by it. Our present analysis does not necessitate a closer examination of this

point. It remains true, nevertheless, that the cost-price of a commodity is always smaller than its value. For no matter how much the cost-price of a commodity may differ from the value of the means of production consumed by it, a previous mistake in this respect is immaterial for the capitalist. The cost-price of a certain commodity has been previously determined, it is a premise independent of the production of our capitalist, while the result of his production is a commodity containing surplus-value, which is an addition to its cost-price. For all other purposes, the statement that the cost-price is smaller than the value of a commodity is now practically changed into the statement that the cost-price is smaller than the price of production. So far as the total social capital is concerned, in the case of which the price of production is equal to the value, this statement is still identical with the former, namely that the cost-price is smaller than the value of a commodity. And while this state of things is modified in the individual spheres of production, still the fundamental fact always remains that, from the point of view of the total social capital, the cost-price of the commodities produced by it is smaller than their value, or smaller than their price of production, which in the case of the total mass of social commodities is identical with their value. The cost-price of a commodity refers only to the quantity of paid labor contained in it, while its value refers to all the paid and unpaid labor contained in it. The price of production refers to the sum of the paid labor plus a certain quantity of unpaid labor determined by conditions which are independent of the individual sphere in which this particular commodity was produced.

The formula that the price of production of a commodity is equal to $k + p$, equal to its cost-price plus profit, is now more precisely modified by the explanation that p equals kp' (p' meaning the average rate of profit), so that the price of production is equal to $k + kp'$. If k is 300 and p', 15%, then the price of production, being $k + kp'$, is $300 + 300 \times \frac{15}{100}$, or 345.

The price of production of the commodities in any particular sphere may alter its magnitude in the following cases:

1) If the average rate of profit is changed through conditions which are independent of this particular sphere, assuming the value of commodities to remain the same (so that the same quantities of dead and living labor are consumed in their production as before).

2) If there is a change of value, either in this particular sphere in consequence of technical changes, or in consequence of a change in the value of the commodities which form elements of the constant capital of this sphere, while the average rate of profit remains unchanged.

3) If the two aforementioned eventualities combine their effects.

In spite of the great changes occurring continually, as we shall see, in the rates of profit of the individual spheres of production, there is on the other hand no rapid change in the average rate of profit, unless it is brought about exceptionally by extraordinary economic events. A change in the average rate of profit is as a rule the belated work of a long series of fluctuations extending over very long periods of time, fluctuations which require much time before they will consolidate and compensate one another so as to bring about a change in the average rate of profit. In all short periods of time (quite aside from fluctuations of market prices), a change in the prices of production is, therefore, always traceable to actual changes in the value of commodities, that is to say, to changes in the total amount of labor-time required for their production. As a matter of course, mere changes in the money-expression of the same values are not at all considered here.[23]

On the other hand it is evident that, from the point of view of the total social capital, the value of the commodities produced by it (or, expressed in money, their price) is equal to the value of the constant capital plus the value of the variable capital plus the surplus-value. Assuming the degree of labor-exploitation to be constant, the rate of profit cannot change so long as the mass of surplus-value remains the same, unless either the value of the constant capital changes, or the

[23] Corbett, page 174.

value of the variable capital, or the value of both, so that C is changed and thereby $\frac{s}{C}$, the general rate of profit. In every event, then, a change in the average rate of profit is conditioned on a change in the value of the commodities which form the elements of the value of the constant, or variable capital, or of both.

Or, the average rate of profit may change, if the degree of labor-exploitation changes, while the value of the commodities remains the same.

Or, if the degree of labor-exploitation remains the same, the average rate of profit may change through a relative change in the labor employed in comparison to the constant capital, as a result of technical changes in the labor-process. But such technical changes must always find expression in a change of value of the commodities, and be accompanied by it, since their production will then require either more or less labor than before.

We saw in part I that the mass of profit and surplus-value were identical. But the rate of profit was from the first distinguished from the rate of surplus-value, and this appeared to be due, at first sight, to a mere difference of calculation. But at the same time this way of looking at the question served from the outset to obscure and mystify the actual origin of surplus-value, since the rate of profit could rise or fall, while the rate of surplus-value remained the same, and vice versa, and since the capitalist had a practical interest only in the rate of profit. But there was an actual difference of magnitude only between the *rates* of surplus-value and of profit, not between the *masses* of surplus-value and of profit. Since the surplus-value was calculated on the total capital in figuring up the rate of profit, and this total capital was regarded as the standard of measurement, the surplus-value itself seemed to have its origin in the total capital and to proceed from all its parts uniformly, so that the organic difference between constant and variable capital was obliterated. In its disguise of profit, the surplus-value had actually concealed its origin, lost its character, and become unrecognizable. However, hitherto the distinction between profit and

surplus-value referred only to a change of quality, or form, and there was no real difference of magnitude between the masses of surplus-value and profit, but only between the rates of surplus-value and profit, in this first stage of their metamorphosis.

But this is changed, as soon as a general rate of profit, and, by means of it, an average mass of profit corresponding to the magnitude of the capitals invested in the various spheres of production, have been established.

After that it is but accidentally that the surplus-value actually produced in any particular sphere of production, and thus the profit, is identical with the profit contained in the selling price of the commodities. It then becomes the rule, that not only the *rates* of surplus-value and profit are the expression of different magnitudes, but also the *masses* of surplus-value and of profit. Assuming a certain degree of exploitation to exist, the mass of the surplus-value produced in any particular sphere of production is now more important for the average profit of the total social capital, and thus for the capitalist class in general, than for the individual capitalist in any individual line of production. It has any importance for the individual capitalist only to the extent [24] that the quantity of surplus-value produced in his line plays a determining role in regulating the average profit. But this is a process which takes place behind his back, which he does not see, nor understand, and which indeed does not interest him at all. The actual difference of magnitude between profit and surplus-value — not merely between the rate of profit and of surplus-value — in the various spheres of production now conceals completely the true nature and origin of profit, not only for the capitalist, who has a special interest in deceiving himself on this score, but also for the laborer. By the transformation of values into prices of production, the basis of the determination of value is itself removed from direct observation. Finally, seeing that the mere transformation of surplus-value into profit separates that portion of the

[24] Of course, we leave aside the question of the probability of securing an extra profit by cutting wages, monopoly prices, etc., at least for the moment.

value of commodities which forms the profit from that portion which forms the cost-price of commodities, it is natural that the capitalist should lose the meaning of the term value at this juncture. For he is not confronted with the total labor put into the production of the commodities, but only with that portion of the total labor which he has paid in the shape of means of production, whether they be alive or dead, so that his profit appears to him as something outside of the immanent value of the commodities. And now this conception is fully endorsed, fortified, and ossified by the fact that, from the point of view of his particular sphere of production, the profit is not determined by the limits drawn for the formation of value within his own circle, but by outside influences.

The fact that the actual state of things is here revealed for the first time; that political economy up to the present time, as we shall see in the following and in volume IV, made either forced abstractions of the distinctions between surplus-value and profit, and their rates, in order to be able to retain the determination of value as a basis, or gave up the determination of value and with it all safeguards of scientific procedure, in order to cling to the obvious phenomena of these differences — this confusion of the theoretical economists demonstrates most strikingly the utter incapacity of the capitalist, when blinded by competition, to penetrate through the outward disguise into the internal essence and the inner form of the capitalist process of production.

In fact, all the laws concerning the rise and fall of the rate of profit, as analysed in part I, have the following double meaning:

1) On the one hand, they are the laws of the average rate of profit. In view of the many different causes which bring about a rise or a fall in the rate of profit, one would think that the average rate of profit would change every day. But a certain movement in one sphere will counterbalance that of another, their effects cross and paralyze one another. We shall examine later on toward which side these fluctuations gravitate ultimately. But they are slow. The suddenness, multiplicity, and different duration of the fluctuations in the

individual spheres of production tend to compensate them mutually in the order of their succession in time, so that a fall in prices follows after a rise, and vice versa, limiting these fluctuations to local, individual, spheres. As a result, the various local fluctuations ultimately neutralise one another. Changes take place within each individual sphere of production, deviations from the average rate of profit, which on the one hand, balance one another after a certain time and thus do not react upon the average rate of profit, and which, on the other hand, do not react upon it, because they are balanced by other simultaneous fluctuations in other local spheres. Since the average rate of profit is determined, not only by the average profits of each sphere, but also by the allotment of the total social capital to the different individual spheres, and since this allotment is continually changing, this is another continuous cause of changes in the average rate of profit. But it is a cause of changes which largely paralyzes itself, owing to its interrupted and many sided nature.

2) Within each sphere, there is a certain playroom for a space of time in which the local rate of profit may fluctuate, before this fluctuation of rise and fall consolidates sufficiently to gain time for exerting an influence on the average rate of profit and assuming more than a local importance. Within these limits of space and time, the laws of the rate of profit, as developed in Part I of this volume, likewise remain applicable.

The theoretical conception, referring to the first transformation of surplus-value into profit, according to which every part of the capital yields uniformly the same profit,[25] expresses a practical fact. Whatever may be the composition of the industrial capital, whether it sets in motion one quarter of dead labor and three quarters of living labor, or three quarters of dead labor and one quarter of living labor, whether it absorbs three times as much surplus-labor, or produces three times as much surplus-value, in one case than in another, it yields the same profit in either case, always assuming the degree of labor-exploitation to be the same, and

[25] Malthus.

leaving aside individual differences, which disappear for the reason that we are dealing in either case with the average composition of the entire sphere of production. The individual capitalist, whose outlook is limited, or even all the capitalists in each individual sphere of production, justly believe that their profits are not derived solely from the labor employed in their own individual sphere. This is quite true so far as their average profit is concerned. To what extent this profit is due to the universal exploitation of labor by means of the total social capital, that is to say, by all his capitalist colleagues, this connection of things is a complete mystery for the individual capitalist. And it is all the more so, since no bourgeois economist has so far cleared it up for him. A saving of labor — not only of labor necessary for the production of a certain product, but also of the number of laborers employed — and the employment of more dead labor (constant capital), appear as very correct operations from an economic point of view, and do not seem to exert the least influence on the average rate of profit and the average profit. How, then, could living labor be the exclusive source of profit, seeing that a reduction in the quantity of labor required for production does not only seem to exert no injurious influence on profit, but even seems, under certain circumstances, to be the first cause for an increase of profits, at least for the individual capitalist?

If there is a rise or fall, in any particular sphere of production, in that portion of the cost-price which represents the value of the constant capital, it is a portion coming out of the circulation and passes from the outset into the process of production of the commodities in its enlarged or reduced state. If, on the other hand, the same number of laborers produces more or less in the same time, so that the quantity of labor required for the production of a definite quantity of commodities varies while the number of laborers remains the same, it may be that that portion of the cost-price, which represents the value of the variable capital, may remain the same and contribute the same amount to the cost-price of the total product. But every individual commodity, whose sum makes

up the total product, shares in more or less labor (paid and unpaid), and shares therefore in the greater or smaller outlay for this labor, a larger or smaller portion of the wages. The total wages paid by the capitalist remain the same, but the calculation for each individual commodity is different. To that extent there would be a change in the cost-price of the commodities. But no matter whether the cost-price of the individual commodities rises or falls, either as a result of such changes of value in this same commodity, or of changes of value in its elements (or, perhaps, the cost-price of the total amount of commodities produced by a capital of a given magnitude), if the average profit is, say, 10%, it remains 10%. Still, 10%, from the point of view of the individual commodity, may represent very different amounts, according to the change of magnitude in the cost-price of the individual commodities called forth by such changes of value as we have assumed.[26]

So far as the variable capital is concerned — and this is the more important, because it is the source of surplus-value, and because anything which conceals its relation to the accumulation of wealth by the capitalist serves to mystify the entire system — the matter assumes a coarser form. It appears to the capitalist in this light: A variable capital of 100 p.st. employs, perhaps, 100 laborers per week. If these 100 laborers produce 200 pieces of commodities or 200 C, per week in a given working time, then 1 C — leaving aside the question of that portion of its cost-price which is added by the constant capital, costs 10 shillings, for 100 p.st. pay for 200 c, and therefore 1 C costs $\frac{100}{200}$ p.st. Now take it that a change takes place in the productive power of labor. Perhaps it is doubled, so that the same number of laborers now produces twice 200 C in the same time in which they used to produce once 200 C. In that case 1 C costs 5 shillings (always speaking only of that portion of the cost-price which consists of wages), for since 100 p.st. now pay for 400 C, 1 C costs $\frac{100}{400}$ p.st. On the other hand, if the productive power were to decrease by one-half, then the same labor would produce

[26] Corbett.

only $\frac{200}{2}$ C. And since 100 p.st. pay for $\frac{200}{2}$ C, 1 C would cost $\frac{200}{200}$ p.st., or 1 p.st. The changes in the labor-time required for the production of the commodities, and thus the changes in their values, thus appear with reference to the cost-price and the price of production as different allotments of the same wages to more or fewer commodities, according to the greater or smaller quantity of commodities produced in the same working time for the same wages. The capitalist, and consequently his political economist, see that the aliquot part of the paid labor falling to the share of each individual commodity changes with the productivity of labor, and that the value of these commodities also changes accordingly. But they do not see that the same is true of the unpaid labor contained in every individual commodity, and they see it so much less since the average profit is but accidentally determined by the unpaid labor absorbed in the sphere of the individual capitalist. Only in this vague and meaningless form are we still reminded of the fact that the value of the commodities is determined by the labor contained in them.

CHAPTER X.

COMPENSATION OF THE AVERAGE RATE OF PROFIT BY COMPETITION. MARKET PRICES AND MARKET VALUES. SURPLUS-PROFIT.

One portion of the spheres of production has an average composition of their capitals, that is to say, their capitals have exactly or approximately the composition of the average social capital.

In these spheres of production, the price of production of the produced commodities coincides exactly or approximately with their values as expressed in money. If there is no other way of reaching a mathematical limit, this would be the one. Competition distributes the social capital in such a way between the various spheres of production that the prices of production of each sphere are formed after the model of the

prices of production in these spheres of average composition, which is $k + kp'$, cost-price plus the average rate of profit multiplied by the cost-price. Now, this average rate of profit is nothing else but the percentage of profit in that sphere of average composition, in which the profit is identical with the surplus-value. Hence the rate of profit is the same in all spheres of production, for it is apportioned according to that one of the average spheres of production in which the average composition of capitals prevails. Consequently the sum of the profits of all spheres of production must be equal to the sum of surplus-values, and the sum of the prices of production of the total social product equal to the sum of its values. But it is evident that the balance between the spheres of production of different composition must tend to equalise them with the spheres of average composition, no matter whether this average composition is exact or only approximate. Again, there are tendencies toward equalisation between the more or less similar spheres, and these tendencies seek to bring about the ideal average, which does not really exist, so that there is a trend toward crystallisation around the ideal. In this way the tendency necessarily prevails to make of the prices of production merely changed forms of value, or to make of profits but mere portions of surplus-value, which are assigned, however, not in proportion to the surplus-value produced in each special sphere of production, but in proportion to the mass of capital employed in each sphere of production, so that equal masses of capital, whatever may be their composition, receive equal aliquot shares of the total surplus-value produced by the total social capital.

In the case of capitals of average, or approximately average, composition, the price of production coincides exactly, or approximately with the value, and the profit with the surplus-value produced by them. All other capitals, of whatever composition, tend toward this average under the pressure of competition. But since the capitals of average composition are of the same, or approximately the same, structure as the average social capital, all capitals have the tendency, regardless of the surplus-value produced by them, to realise in the prices of

their commodities the average profit, instead of their own surplus-value, in other words, to realise the prices of production.

On the other hand it may be said that whenever an average profit, and a general rate of profit, are brought about, no matter by what means, such an average profit cannot be anything else but the profit on the average social capital, the sum of these average profits being equal to the sum of surplus-values produced by the average social capitals, and that the prices brought about by adding this average profit to the cost-prices cannot be anything else but the values transformed into prices of production. It would not alter matters, if certain capitals in certain spheres of production would not submit to the process of equalisation for some reason or other. In that case the average profit would be computed on that portion of the social capital which takes part in the process of equalisation. It is evident that the average profit cannot be anything else but the total mass of surplus-values allotted to the various masses of capital in the different spheres of production in proportion to their magnitudes. The average profit is the total amount of realised unpaid labor, and this total mass of unpaid labor, the same as the paid, dead or living, labor, is materialised in the total mass of commodities and money falling to the share of the capitalists.

The real difficulty lies in the question: How is this equalisation of profits into an average rate of profit brought about, seeing that it is evidently a result, not a point of departure?

It is obvious that an estimate of the values of the commodities, for instance in money, can not be made until they have been exchanged. If we assume such an estimate, we must regard it as the outcome of an actual exchange of commodity-value for commodity-value. But how should such an exchange of commodities at their real values have come about?

Let us assume that all commodities in the different lines of production are sold at their real values. What would be the outcome? According to our foregoing analyses, the rates of profit in the various spheres of production would differ considerably. It is quite obvious that we are dealing with two different things, whether on the one hand commodities

are sold at their values (that is to say, sold in proportion to the value contained in them, or exchanged with one another at the price of their values), or whether, on the other hand, they are sold at such prices that their sale yields equal amounts of profits on equal masses of the respective capitals advanced for their production.

If capitals employing unequal amounts of living labor are to produce unequal amounts of surplus-value, it must be assumed, at least to a certain degree, that the intensity of exploitation, or the rate of surplus-value, are the same, or that any existing differences in them are balanced by real or imaginary (conventional) elements of compensation. This would presuppose a competition among the laborers and an equilibration by means of their continual emigration from one sphere of production to another. Such a general rate of surplus-value — as a tendency, like all other economic laws — has been assumed by us for the sake of theoretical simplification. But in reality it is an actual premise of the capitalist mode of production, although it is more or less obstructed by practical frictions causing more or less considerable differences locally, such as the settlement laws for English farm laborers. But in theory it is the custom to assume that the laws of capitalist production evolve in their pure form. In reality, however, there is always but an approximation. Still, this approximation is so much greater to the extent that the capitalist mode of production is normally developed, and to the extent that its adulteration and amalgamation with remains of former economic conditions is outgrown.

The whole difficulty arises from the fact that commodities are not exchanged simply as commodities, but as products of capitals, which claim equal shares of the total amount of surplus-value, if they are of equal magnitude, or shares proportional to their different magnitudes. And this claim is to be satisfied by the total price realised by a certain capital on the commodities produced by it within a certain space of time. This total price, again, is but the sum of the prices of the individual commodities produced by this capital.

The essential point will become most visible, when we look

upon the matter in this way: Let us assume that the laborers themselves are in possession of their respective means of production and exchange their commodities with one another. In that case these commodities would not be products of capital. The value of the various instruments of labor and raw materials would differ according to the technical nature of the labors performed in the different lines of production. Furthermore, aside from the unequal value of the means of production employed by them, they would require different quantities of means of production for given quantities of labor, according to whether a certain commodity can be finished in one hour, another in one day, and so forth. Let us assume, also, that these laborers work on an average equal lengths of time, allowing for compensations due to different intensities of labor. In that case, two laborers, both working one day, would have in the commodities produced by them, first, an equivalent for their outlay, the cost-prices of the means of production consumed by their labor. These would differ according to the technical nature of their lines of production. In the second place, both of them would have created equal amounts of new value, namely the working day added by them to the means of production. This would comprise their wages plus the surplus-value, the last representing surplus-labor exceeding their necessary wants, the product of which would belong to them. If we were to use capitalist terms, we should say that both of them receive the same wages plus the same profit, or the same value expressed, say, by the product of a working day of ten hours. But in the first place, the values of their commodities would differ. The commodities of I, for instance, might contain more value for each portion of the consumed means of production than the commodities of II. And, to introduce all possible differences, we may assume right now that the commodities of I absorb more living labor, and consequently require more labor-time for their production, than the commodities of II. Then the value of the commodities of I and II, we repeat, differs considerably. So do the sums of the values of their commodities, which represent the product of the labor performed by laborers I and II in a certain

time. The rates of profit would also differ considerably for I and II, assuming that we call rate of profit, in this case, the proportion of the surplus-value to the total value of the invested means of production. The means of subsistence daily consumed by I and II during production, which take the place of wages, will form that part of the invested capital which we would call variable capital under different circumstances. But the surplus-values would be the same for I and II, or, to express it more accurately, since both I and II receive the value of the product of one day's labor, both of them receive equal values after the value of the invested "constant" capital has been deducted, and we may regard one portion of this remaining value as an equivalent for the means of subsistence consumed during production, and the other as surplus-value. If laborer I has higher expenses, they are made good by a greater portion of the value of his commodities replacing this "constant" part, and he has to reconvert a larger portion of the total value of his product into the material elements of this constant part, while laborer II, if he receives less for this purpose, has to reconvert so much less. Under these circumstances a difference in the rates of profit would be of no concern, just as it is immaterial for the wage-laborer to-day what rate of profit may express the amount of surplus-value filched from him, and just as in international commerce the difference in the various national rates of profit is immaterial for the exchange of their commodities.

The exchange of commodities at their values, or approximately at their values, requires, therefore, a much lower stage than their exchange at their prices of production, which requires a relatively high development of capitalist production.

Whatever may be the way in which the prices of the various commodities are first fixed or mutually regulated, the law of value always dominates their movements. If the labor time required for the production of these commodities is reduced, prices fall; if it is increased, prices rise, other circumstances remaining the same.

Aside from the fact that prices and their movements are

dominated by the law of value, it is quite appropriate, under these circumstances, to regard the value of commodities not only theoretically, but also historically, as existing prior to the prices of production. This applies to conditions, in which the laborer owns his means of production, and this is the condition of the land-owning farmer and of the craftsman in the old world as well as the new. This agrees also with the view formerly expressed by me that the development of product into commodities arises through the exchange between different communes, not through that between the members of the same commune.[27] It applies not only to this primitive condition, but also to subsequent conditions based on slavery or serfdom, and to the guild organisation of handicrafts, so long as the means of production installed in one line of production cannot be transferred to another line except under difficulties, so that the various lines of production maintain, to a certain degree, the same mutual relations as foreign countries or communistic groups.

In order that the prices at which commodities are exchanged with one another may correspond approximately to their values, no other conditions are required but the following: 1) The exchange of the various commodities must no longer be accidental or occasional, 2) So far as the direct exchange of commodities is concerned, these commodities must be produced on both sides in sufficient quantities to meet mutual requirements, a thing easily learned by experience in trading, and therefore a natural outgrowth of continued trading, 3) So far as selling is concerned, there must be no accidental or artificial monopoly which may enable either of the contracting sides to sell commodities above their value or compel others to sell below value. An accidental monopoly is one which a buyer or seller acquires by an accidental proportion of supply to demand.

The assumption that the commodities of the various spheres of production are sold at their value implies, of course, only

[27] In 1865, when Marx wrote these lines, they expressed as yet merely his "view." To-day, since we have the extended researches into the nature of primitive societies made from Maurer to Morgan, these things are accepted facts which hardly anyone cares to deny.— F. E.

that their value is the center of gravity around which prices fluctuate, and around which their rise and fall tends to an equilibrium. We shall also have to note a *market value,* which must be distinguished from the individual value of the commodities produced by the various producers. Of this more anon. The individual value of some of these commodities will be below the market-value, that is to say, they require less labor-time for their production than is expressed in the market-value, while that of others will be above the market-value. We shall have to regard the market-value on one side as the average value of the commodities produced in a certain sphere, and on the other side as the individual value of commodities produced under the average conditions of their respective sphere of production and constituting the bulk of the products of that sphere. It is only extraordinary combinations of circumstances under which commodities produced under the least or most favorable conditions regulate the market-value, which forms the center of fluctuation for the market-prices, which are the same, however, for the same kind of commodities. If the ordinary demand is satisfied by the supply of commodities of average value, that is to say, of a value midway between the two extremes, then those commodities, whose individual value stands below the market-value, realise an extra surplus-value, or surplus-profit, while those, whose individual value stands above the market-value cannot realise a portion of the surplus-value contained in them.

It does not do any good to say that the sale of the commodities produced under the most unfavorable conditions proves that they are required for keeping up the supply. If the price in the assumed case were higher than the average market-value, the demand would be greater. At a certain price, any kind of commodities may occupy so much room on the market. This room does not remain the same in the case of a change of prices, unless a higher price is accompanied by a smaller quantity of commodities, and a lower price by a larger quantity of commodities. But if the demand is so strong that it does not let up when the price is regulated by

the value of the commodities produced under the most unfavorable conditions, then these commodities determine the market-value. This is not possible unless the demand exceeds the ordinary, or the supply falls below it. Finally, if the mass of the produced commodities exceeds the quantity which is ordinarily disposed of at average market-values, then the commodities produced under the most favorable conditions regulate the market-value. These commodities may be sold exactly or approximately at their individual values, and in that case it may happen that the commodities produced under the least favorable conditions do not realise even their cost-prices, while those produced under average conditions realise only a portion of the surplus-value contained in them. The statements referring to market-value apply also to the price of production, if it takes the place of market-value. The price of production is regulated in each sphere, and this regulation depends on special circumstances. And this price of production is in its turn the center of gravity around which the daily market-prices fluctuate and tend to balance one another within definite periods. (See Ricardo on the determination of the price of production by those who produce under the least favorable conditions.)

No matter what may be the way in which prices are regulated, the result always is the following:

1) The law of value dominates the movements of prices, since a reduction or increase of the labor-time required for production causes the prices of production to fall or to rise. It is in this sense that Ricardo (who doubtless realised that his prices of production differed from the value of commodities) says that "the inquiry to which he wishes to draw the reader's attention relates to the effect of the variations in the relative value of commodities, and not in their absolute value."

2) The average profit which determines the prices of production must always be approximately equal to that quantity of surplus-value, which falls to the share of a certain individual capital in its capacity as an aliquot part of the total social capital. Take it that the average rate of profit, and therefore the average profit, are expressed by an amount of

money of a higher value than the money-value of the actual average surplus-value. So far as the capitalists are concerned in that case, it is immaterial whether they charge one another a profit of 10 or of 15%. The one of these percentages does not cover any more actual commodity-value than the other, since the overcharge in money is mutual. But so far as the laborer is concerned (the assumption being that he receives the normal wages, so that the raising of the average profit does not imply an actual deduction from his wages, in other words, does not express something entirely different from the normal surplus-value of the capitalist), the rise in the price of commodities due to a raising of the average profit must be accompanied by a corresponding rise of the money-expression for the variable capital. As a matter of fact, such a general nominal raising of the rate of profit and the average profit above the limit provided by the proportion of the actual surplus-value to the total invested capital is not possible without carrying in its wake an increase of wages, and also an increase in the prices of the commodities which constitute the constant capital. The same is true of the opposite case, that of a reduction of the rate of profit in this way. Now, since the total value of the commodities regulates the total surplus-value, and this the level of the average profit and the average rate of profit — always understanding this as a general law, as a principle regulating the fluctuations — it follows that the law of value regulates the prices of production.

Competition first brings about, in a certain individual sphere, the establishment of an equal market-value and market-price by averaging the various individual values of the commodities. The competition of the capitals in the different spheres then results in the price of production which equalises the rates of profit between the different spheres. This last process requires a higher development of capitalist production than the previous process.

In order that commodities of the same sphere of production, the same kind, and approximately the same quality, may be sold at their value, the following two requirements must be fulfilled:

1) The different individual values must have been averaged into *one* social value, the above-named market-value, and this implies a competition between the producers of the same kind of commodities, and also the existence of a common market, on which they offer their articles for sale. In order that the market-price of identical commodities, which however are produced under different individual circumstances, may correspond to the market-value, may not differ from it by exceeding it or falling below it, it is necessary that the different sellers should exert sufficient pressure upon one another to bring that quantity of commodities on the market which social requirements demand, in other words, that quantity of commodities whose market-value society can pay. If the quantity of products exceeds this demand, then the commodities must be sold below their market-value; vice versa, if the quantity of products is not large enough to meet this demand, or, what amounts to the same, if the pressure of competition among the sellers is not strong enough to bring this quantity of products to market, then the commodities are sold above their market-value. If the market-value is changed, then there will also be a change in the conditions under which the total quantity of commodities can be sold. If the market-value falls, then the average social demand increases (always referring to the solvent demand) and can absorb a larger quantity of commodities within certain limits. If the market-value rises, then the solvent social demand for commodities is reduced and smaller quantities of them are absorbed. Hence if supply and demand regulate the market-price, or rather the deviations of market-prices from market-values, it is true, on the other hand, that the market-value regulates the proportions of supply and demand, or the center around which supply and demand cause the market-prices to fluctuate.

If we look closer at the matter, we find that the conditions determining the value of some individual commodity become effective, in this instance, as conditions determining the value of the total quantities of a certain kind. For, generally speaking, capitalist production is from the outset a mass-production.

And even other, less developed, modes of production carry small quantities of products, the result of the work of many small producers, to market as co-operative products, at least in the main lines of production, concentrating and accumulating them for sale in the hands of relatively few merchants. Such commodities are regarded as co-operative products of an entire line of production, or of a greater or smaller part of this line.

We remark by the way that the "social demand," in other words, that which regulates the principle of demand, is essentially conditioned on the mutual relations of the different economic classes and their relative economic positions, that is to say, first, on the proportion of the total surplus-value to the wages, and secondly, on the proportion of the various parts into which surplus-value is divided (profit, interest, ground-rent, taxes, etc.). And this shows once more that absolutely nothing can be explained by the relation of supply and demand, unless the basis has first been ascertained, on which this relation rests.

Although both commodity and money represent units of exchange-value and use-value, we have already seen in volume I, chapter I, 3, that in buying and selling both of these functions are polarised at the two extremes, the commodity (seller) representing the use-value, and the money (buyer) the exchange-value. It was one of the first conditions for the sale of a commodity that it should have a use-value and satisfy some social need. The other essential condition was that the quantity of labor contained in a certain commodity should represent socially necessary labor, so that its individual value (and what amounts to the same under the present assumption, its selling price) should coincide with its social value.[28]

Now let us apply this to the mass of commodities on the market, which represent the product of a whole sphere of production. The matter will be most easily explained by regarding this whole mass of commodities, coming from one line of production, as one single commodity, and the sum of the prices of the many identical commodities as one price. In

[28] Karl Marx, Critique of Political Economy, Berlin, 1859.

that case the statements made in regard to one individual commodity apply literally to the mass of commodities sent to the market by one entire line of production. The postulate that the individual value of a commodity should correspond to its social value has then the significance that the total quantity of commodities contains the quantity of social labor necessary for its production, and that the value of this mass is equal to its market-value.

Now let us assume that the bulk of these commodities has been produced under approximately the same normal conditions of social labor, so that this social value is at the same time identical with the individual value of the individual commodities constituting this mass. In that case, a relatively small portion of these commodities may have been produced below, and another above, these conditions, so that the individual value of the one portion is greater, and that of the other smaller, than the average value of the bulk of the commodities, but in such proportions that these extremes balance one another. The average value of the commodities in these extremes is then equal to the average value of the great bulk of average commodities. Under such circumstances, the market-value is determined by the value of the commodities produced under average conditions.[29] The value of the entire mass of commodities is equal to the actual sum of the values of all individual commodities combined, no matter whether they were produced under average conditions, or under conditions above or below the average. In this case, the market-value, or the social value, of the mass of commodities — the necessary labor time contained in them — is determined by the value of the average bulk.

Let us assume, on the other hand, that the total mass of commodities brought to market remains the same, while the value of the commodities produced under the least favorable conditions is not balanced by the value of the commodities produced under the most favorable conditions, so that the mass of commodities produced under the least favorable conditions constitutes a relatively large quantity, compared to the

[29] Karl Marx, Critique of Political Economy, Berlin, 1859.

average mass as well as to the other extreme. In that case the mass produced under the least favorable conditions determines the market-value, or social value.

Take it, finally, that the mass of commodities produced under the most favorable conditions is considerably in excess of the mass produced under the least favorable conditions, and is large even compared with the average mass. Then the mass produced under the most favorable conditions determines the market-value. We leave aside the question of a transfer of the market, whenever the mass of commodities produced under the most favorable conditions regulates the market-price. We are not dealing here with the market-price in so far as it differs from the market-value, but with the various modes of determining the market-value itself.[30]

In fact, assuming the strictest case (which, of course, is realised only approximately and with a thousand modifications) of our first illustration, the market-value regulated by the average values of the total mass of commodities is equal to the sum of their individual values, although this market-value is forced as an average value upon the commodities produced at the extremes. Those who produce under the worst conditions must then sell their commodities below their individual values; those producing under the best conditions sell them above their individual values.

In the second case, the two lots of commodities produced

[30] The controversy between Storch and Ricardo, incidental to their discussion of ground rent (a controversy which is merely referring to the same object, while the two opponents take no notice of one another) whether the market-value (or rather what they call market-price and price of production respectively) is regulated by the commodities produced under the least favorable conditions (Ricardo), or by those produced under the most favorable circumstances (Storch), resolves itself into the fact that both are right and both wrong, and that both of them have left out of consideration the average case. Compare Corbett on the cases, in which the price is regulated by the commodities produced under the most favorable conditions.—"It is not meant to be asserted by him (Ricardo) that two particular lots of two different articles, as a hat and a pair of shoes, exchange with one another when those two particular lots were produced by equal quantities of labor. By 'commodity' we must here understand the 'description of commodity,' not a particular individual hat, pair of shoes, etc. The whole labor which produces all the hats in England is to be considered, for this purpose, as divided among all the hats. This seems to me not to have been expressed at first, and in the general statements of this doctrine. (Observations on some verbal disputes in Political Economy, etc. London, 1821, pages 53, 54.)

at the two extremes do not balance one another. The lot produced under the worst conditions decides the question. Strictly speaking, the average price, or the market-value, of every individual commodity, or of every aliquot part of the total mass, would now be determined by the total value of the mass as ascertained by the addition of the values of the commodities produced under different conditions, and by the aliquot part of this total value falling to the share of the individual commodity. The market-value thus ascertained would be above the individual value, not only of the commodities belonging to the most favorable extreme, but also of those belonging to the average lot. But still it would be below the individual value of the commodities produced at the most unfavorable extreme. The extent to which this market-value would approach the individual value of this extreme, or coincide with it, would depend entirely on the volume occupied in that sphere of commodities by the lot of commodities produced at the unfavorable extreme. If the demand exceeds the supply but slightly, then the individual value of the unfavorably produced commodities regulates the market-price.

Finally, if the lot of commodities produced at the most favorable extreme occupies the greatest space, as it does in the third case, compared not only to the other extreme, but also to the average lot, then the market-value falls below the average value. The average value, computed by the addition of the sum of values of the two extremes and of the middle, stands here below that of the middle, and approaches it or recedes from it, according to the relative space occupied by the favorable extreme. If the demand is weak compared to the supply, then the favorably situated part, whatever may be its size, makes room for itself forcibly by contracting its price down to its individual value. The market-value cannot coincide with this individual value of the commodities produced under the most favorable conditions, except when the supply far exceeds the demand.

This mode of determining market-values, which we have here outlined abstractly, is promoted on the real market by competition among the buyers, provided that the demand is

just large enough to absorb the quantity of commodities at the values fixed in this manner. And this brings us to the second point.

2) To say that a commodity has a use-value is merely to say that it satisfies some social want. So long as we were dealing simply with individual commodities, we could assume that the demand for any one commodity — its price implying its quantity — existed without inquiring into the extent to which this demand required satisfaction. But this question of the extent of a certain demand becomes essential, whenever the product of some entire line of production is placed on one side, and the social demand for it on the other. In that case it becomes necessary to consider the amount, the quantity, of this social demand.

In the foregoing statements referring to market-value, the assumption was that the mass of the produced commodities remains the same given quantity, and that a change takes place only in the proportions of the elements constituting this mass and produced under different conditions, so that the market-value of the same mass of commodities is differently regulated. Let us suppose that this mass is of a quantity equal to the ordinary supply, leaving aside the possibility that a portion of the produced commodities may be temporarily withdrawn from the market. Now, if the demand for this mass also remains the same, then this commodity will be sold at its market-value; no matter which one of the three aforementioned cases may regulate this market-value. This mass of commodities does not only satisfy a demand, but satisfies it to its full social extent. On the other hand, if the quantity is smaller than the demand for it, then the market-prices differ from the market-values. And the first differentiation is that the market-value is always regulated by the commodity produced under the least favorable circumstances, if the supply is too small, and by the commodity produced under the most favorable conditions, if the supply is too large. In other words, one of the extremes determines the market-value, in spite of the fact that the proportion of the masses produced under different conditions ought to bring about a different re-

sult. If the difference between demand and supply of the product is very considerable, then the market-price will likewise differ considerably from the market-value in either direction. Now, the difference between the quantity of the produced commodities and the quantity of commodities which fixes their sale at their market-value may be due to two reasons. Either the quantity itself varies, by decreasing or increasing, so that there would be a reproduction on a different scale than the one which regulated a certain market-value. If so, then the supply changes while the demand remains unchanged, and we have a relative overproduction or underproduction. Or, the reproduction, and the supply, remain the same, while the demand is reduced or increased, which may take place for several reasons. If so, then the absolute magnitude of the supply is unchanged, while its relative magnitude, compared to the demand, has changed. The effect is the same as in the first case, only it acts in the opposite direction. Finally, if changes take place on both sides, either in opposite directions, or, if in the same direction, not to the same extent, in other words, if changes take place on both sides which alter the former proportion between these sides, then the final result must always lead to one of the two abovementioned cases.

The real difficulty in determining the meaning of the concepts supply and demand is that they seem to amount to a tautology. Consider first the supply, either the product on the market, or the product which can be supplied to the market. In order to avoid useless details, we shall consider only the mass annually reproduced in every given line of production and leave out of the question the varying faculty of some commodities to withdraw from the market and go into storage for consumption at a later time, for instance next year. This annual reproduction is expressed in a certain quantity, in weight or numbers, according to whether this mass of commodities is measured continuously or discontinuously. They represent not only use-value satisfying human wants, but these use-values are on the market in definite quantities. In the second place, this quantity of commodities has

a definite market-value, which may be expressed by a multiple of the market-value of the individual commodity, or of the measure, which serve as units. There is, then, no necessary connection between the quantitative volume of the commodities on the market and their market-value, since many commodities have, for instance, a high specific value, others a low specific value, so that a given sum of values may be represented by a very large quantity of some, and a very small quantity of other commodities. There is only this connection between the quantity of articles on the market and the market-value of these articles: Given a certain basis for the productivity of labor in every particular sphere of production, the production of a certain quantity of articles requires a definite quantity of social labor time; but this proportion differs in different spheres of production and stands in no internal relation to the usefulness of these articles or the particular nature of their use-values. Assuming all other circumstances to be equal, and a certain quantity *a* of some commodity to cost *b* labor time, a quantity *na* of the same commodity will cost *nb* labor-time. Furthermore, if society wants to satisfy some demand and have articles produced for this purpose, it must pay for them. Since the production of commodities is accompanied by a division of labor, society buys these articles by devoting to their production a portion of its available labor-time. Society buys them by spending a definite quantity of the labor-time over which it disposes. That part of society, to which the division of labor assigns the task of employing its labor in the production of the desired article, must be given an equivalent for it by other social labor incorporated in articles which *it* wants. There is, however, no necessary, but only an accidental, connection between the volume of society's demand for a certain article and the volume represented by the production of this article in the total production, or the quantity of social labor spent on this article, the aliquot part of the total labor-power spent by society in the production of this article. True, every individual article, or every definite quantity of any kind of commodities, contains, perhaps, only the social labor required

for its production, and from this point of view the market-value of this entire mass of commodities of a certain kind represents only necessary labor. Nevertheless, if this commodity has been produced in excess of the temporary demand of society for it, so much of the social labor has been wasted, and in that case this mass of commodities represents a much smaller quantity of labor on the market than is actually incorporated in it. (Only when production will be under the conscious and prearranged control of society, will society establish a direct relation between the quantity of social labor time employed in the production of definite articles and the quantity of the demand of society for them.) The commodities must then be sold below their market-value, and a portion of them may even become unsaleable. The opposite takes place, if the quantity of social labor employed in the production of a certain kind of commodities is too small to meet the social demand for them. But if the quantity of social labor spent in the production of a certain article corresponds to the social demand for it, so that the quantity produced is that which is the ordinary on that scale of production and for that same demand, then the article is sold at its market-value. The exchange, or sale, of commodities at their value is the rational way, the natural law of their equilibrium. It must be the point of departure for the explanation of deviations from it, not vice versa the deviations the basis on which this law is explained.

Now let us look at the other side, the demand.

Commodities are bought either as means of production or means of subsistence, in order to be used for productive or individual consumption. It does not alter matters that some commodities may serve both ends. There is, then, a demand for them on the part of the producers (who are capitalists in this case, since we have assumed that the means of production have been transformed into capital) and on the part of the consumers. It appears at first sight as though these two sides ought to have a corresponding quantity of social demands offset by a corresponding quantity of social supplies in the various lines of production. If the cotton in-

dustry is to accomplish its annual reproduction on a given scale, it must produce the usual quantity of cotton and an additional quantity determined by the annual extension of reproduction through the necessities of accumulating capital, always assuming other circumstances to remain the same. This is also true of means of subsistence. The working class must find at least the same quantity of necessities on hand, if it is to continue living in the accustomed way, although these necessities may be of different kinds and differently distributed. And there must be an additional quantity to allow for the annual increase of population. This applies with more or less modification to the other classes.

It would seem, then, that there is on the side of demand a definite magnitude of social wants which require for their satisfaction a definite quantity of certain articles on the market. But the quantity demanded by these wants is very elastic and changing. Its fixedness is but apparent. If the means of subsistence were cheaper, or money-wages higher, the laborers would buy more of them, and a greater "social demand" would be manifested for this kind of commodities, leaving aside the question of paupers, whose "demand" is even below the narrowest limits of their physical wants. On the other hand, if cotton were cheaper, the demand of the capitalists for it would increase, more additional capital would be thrown into the cotton industry, etc. It must never be forgotten that the demand for productive consumption is a demand of capitalists, under our assumption, and that its essential purpose is the production of surplus-value, so that commodities are produced only to this end. Still this does not argue against the fact that the capitalist as a buyer, for instance of cotton, represents the demand for this cotton. Moreover it is immaterial to the seller of cotton, whether the buyer converts it into shirting or into guncotton, or whether he intends to make it into wads for his and the world's ears. But it *does* exert a considerable influence on the way in which the capitalist acts as a buyer. His demand for cotton is essentially modified by the fact that he disguises thereby his real demand, that of making profits. The limits within

which the *need for commodities on the market*, the demand, differs quantitatively from the *actual social need*, varies naturally considerably for different commodities; in other words, the difference between the demanded quantity of commodities and that quantity which would be demanded, if the money-prices of the commodities, or other conditions concerning the money or living of the buyers, were different.

Nothing is easier than to realise the inequalities of demand and supply, and the resulting deviation of market-prices from market-values. The real difficulty consists in determining what is meant by balancing supply and demand.

Demand and supply balance one another, when their mutual proportions are such that the mass of commodities of a definite line of production can be sold at their market-value, neither above nor below it. That is the first thing we hear.

The second is this: If the commodities are sold at their market-values, then supply and demand balance.

If demand and supply balance, then they cease to have any effect, and for this very reason commodities are sold at their market-values. If two forces exert themselves equally in opposite directions, they balance one another, they have no influence at all on the outside, and any phenomena taking place at the same time must be explained by other causes than the influence of these forces. If demand and supply balance one another, they cease to explain anything, they do not affect market-values, and therefore leave us even more in the dark than before concerning the reasons for the expression of the market-value in just a certain sum of money and no other. It is evident that the essential fundamental laws of production cannot be explained by the interaction of supply and demand (quite aside from a deeper analysis of these two motive forces of social production, which would be out of place here). For these laws cannot be observed in their pure state, until the effects of supply and demand are suspended, are balanced. As a matter of fact supply and demand never balance, or, if they do, it is by mere accident, it is scientifically rated at zero, it is considered as not happening. But political economy assumes that supply and demand balance one an-

other. Why? For no other reason, primarily, than to be able to study phenomena in their fundamental relations, in that elementary form which corresponds to their conception, that is to say, to study them unhampered by the disturbing interference of supply and demand. The other reason is to find the actual tendencies of economic movements and to fix them, as it were. For the inequalities are of an antagonistic nature, and since they continually follow one after another, they balance one another by their opposite movements, by their opposition. Since supply and demand never balance each other in any given case, their differences follow one another in such a way that supply and demand are always balanced only when looking at them from the point of view of a greater or smaller period of time. For the result of a deviation in one direction is a deviation in the opposite direction. Such a balance is only an average of past movements, a result of a continual movement in contradictions. By this means the market-prices differing from the market-values reduce one another to the average of market-values and balance the different plus and minus in their divergencies. And this average figure has not merely a theoretical, but also a practical, value for capital, since its investment is calculated on the fluctuations and compensations of more or less fixed periods of time.

The relation of demand and supply explains, therefore, on the one hand only the deviations of market-prices from market-values, and on the other the tendency to balance these deviations, in other words, to suspend the effect of the relation of demand and supply. (Such exceptions as commodities having prices without having any value are not considered here.) Demand and supply may bring about a balance in the effects caused by their inequalities in many different ways. For instance, if the demand, and consequently the market-price, fall, capital may be withdrawn and the supply reduced. But instead it may happen that the market-value itself is reduced and balanced with the market-price through inventions, which reduce the necessary labor time. Vice versa, if the demand increases, and consequently the market-price rises

above the market-value, too much capital may flow into this line of production and production may be increased to such an extent, that the market-price finally falls below the market-value. Or, it may lead to a rise of prices which cuts down the demand. It may also bring about a rise in the market-value itself for a shorter or longer time, in some lines of production, in which a portion of the desired products must be produced under more unfavorable conditions during this period.

If demand and supply determine the market-price, so does the market-price, and in the further analysis the market-value determine demand and supply. This is obvious in the case of demand, which moves in opposition to price, rising when prices fall, and falling when prices rise. But it may also be noted in the case of supply. For the prices of the means of production which are incorporated in the supplied commodities determine the demand for these means of production, and thus the supply of the commodities whose supply implies the demand for these means of production. The prices of cotton are determining elements for the supply of cotton goods.

This confusion of a determination of prices by demand and supply, and at the same time a determination of supply and demand by prices, is worse confounded by the determination of the supply by the demand, and the demand by supply, of the market by production, and of production by the market.[31]

[31] The following sagacious statements are great nonsense: "Where the quantity of wages, capital, and land, required to produce an article, have become different from what they were, that which Adam Smith calls the natural price of it, is also different, and that price which was previously its natural price, becomes, with reference to this alteration, its market-price; because, though neither the supply, nor the quantity wanted may have changed"— both of them change here, just because the market-value, or, in the case of Adam Smith, the price of production, changes in consequence of a change of value —"that supply is not now exactly enough for those persons who are able and willing to pay what is now the cost of production, but is either greater or less than that; so that the proportion between the supply, and what is, with reference to the new cost of production, the effectual demand, is different from what it was. An alteration in the rate of supply will then take place, if there is no obstacle in the way of it, and at last bring the commodity to its new natural price. It may then seem good to some persons to say that, as the commodity gets to its natural price by an alteration in its supply, the natural price is as much owing to one proportion between the demand and supply, as the market-price is to another; and conse-

Even the ordinary economist (see our foot-note) recognizes that the proportion between supply and demand may vary in consequence of a change in the market-value of commodities, without a change in the demand or supply by external circumstances. The author of the *Observations* continues after the passage quoted in the foot-note: "This proportion" (between demand and supply) "however, if we still mean by 'demand' and 'natural price' what we meant just now, when referring to Adam Smith, must always be a proportion of equality; for it is only when the supply is equal to the effectual demand, that is, to that demand, which will pay neither more nor less than the natural price, that the natural price is in fact paid; consequently there may be two very different natural prices, at different times, for the same commodity, and yet the proportion which the supply bears to the demand, be in both cases the same, namely the proportion of equality." It is admitted, then, that with two different natural prices of the same commodity at different times demand and supply may balance one another and must balance one another, if the commodity is to be sold at its natural price in both instances. Since there is no difference in the proportion of supply and demand in either case, but only a difference in the magnitude of the natural price itself, it follows that this price is determined independently of demand and supply, and cannot very well be determined by them.

In order that a commodity may be sold at its market-value, that is to say, in proportion to the necessary social labor contained in it, the total quantity of social labor devoted to the

quently, that the natural price, just as much as the market-price, depends on the proportion that demand and supply bear to each other. (The great principle of demand and supply is called into action to determine what A. Smith calls natural prices as well as market-prices. Malthus.)"— Observations on certain verbal disputes, etc., London, 1821, pages 60 and 61.— The good man does not grasp the fact that it is precisely the change in the cost of production, and thus in the value, which caused a change in the demand, in the present case, and thus in the proportion between demand and supply, and that this change in the demand may bring about a change in the supply. This would prove just the reverse of what our good thinker wants to prove. It would prove that the change in the cost of production is by no means due to the proportion of demand and supply, but rather regulates this proportion.

total mass of this kind of commodities must correspond to the quantity of the social demand for them, meaning the solvent social demand. Competition, the fluctuations of market-prices which correspond to the fluctuations of demand and supply, tend continually to reduce the total quantity of labor devoted to each kind of commodities to this scale.

The proportion of supply and demand repeats, in the first place, the relation of the use-value and exchange-value of commodities, of commodity and money, of buyer and seller; in the second place, the relation of producer and consumer, although both of them may be represented by third merchants. In studying buyers and sellers, it is sufficient to confront them individually, in order to set forth their relations. Three individuals suffice for the complete metamorphosis of commodities, and therefore for the complete transactions of sale and purchase. A converts his commodity into the money of B, to whom he sells his commodity, and he reconverts his money into commodities which he buys for it from C. The whole transaction takes place between these three. Furthermore: In the study of money it had been assumed that the commodities are sold at their values, because there was no reason to take into consideration any divergence of prices from values, it being a question of changes of form experienced by the commodities in their transformation into money and their reconversion from money into commodities. As soon as a commodity has been sold and a new commodity bought with the receipts, we have the entire metamorphosis before us, and for the consideration of this process it is immaterial whether the price of the commodity stands above or below its value. The value of the commodity is essential as a basis, because the concept of money cannot be developed on any other foundation but this one, and because price, in its general meaning, is but value in the form of money. Of course, it is assumed in the study of money as a medium of circulation that more than one metamorphosis of a certain commodity takes place. It is the social interrelation of these metamorphoses which is studied. Only by this means do we arrive at the circulation of money and at the development

of its function as a medium of circulation. While this connection of the matter is very important for the transition of money into its function of a circulating medium, and for its resulting change of form, it is of no moment for the transaction between the individual buyer and seller.

In a question of supply and demand, however, the supply means the sum of the sellers, or producers, of a certain kind of commodities, and the demand the sum of the buyers, or consumers, of the same kind of commodities (both productive and individual consumers). There two bodies react on one another as units, as aggregate forces. The individual counts here only as a part of a social power, as an atom of some mass, and it is in this form that competition enforces the social character of production and consumption.

That side of competition, which is momentarily the weaker, is also that in which the individual acts independently of the mass of his competitors and often works against them, whereby the dependence of one upon the other is impressed upon them, while the stronger side always acts more or less unitedly against its antagonist. If the demand for this particular kind of commodities is larger than the supply, then one buyer outbids another, within certain limits, and thereby raises the price of the commodity for all of them above the market-price, while on the other hand the sellers unite in trying to sell at a high price. If, vice versa, the supply exceeds the demand, some one begins to dispose of his goods at a cheaper rate and the others must follow, while the buyers unite in their efforts to depress the market-price as much as possible below the market-value. The common interest is appreciated only so long as each gains more by it than without it. And common action ceases, as soon as this or that side becomes the weaker, when each one tries to get out of it by his own devices with as little loss as possible. Again, if some one produces more cheaply and can sell more goods, thus assuming more room on the market by selling below the current market-price, or market-value, he does it, and thereby he begins an action which gradually compels the others to introduce the cheaper mode of production and which reduces the socially necessary labor to a

new, and lower, level. If one side has the advantage, every one belonging to it gains. It is as though they had exerted their common monopoly. If one side is the weaker, then every one may try on his own hook to be the stronger (for instance, any one working with lower costs of production), or at least to get off as easily as possible, and in that case he does not care in the least for his neighbor, although his actions affect not only himself, but also all his fellow strugglers.[32]

Demand and supply imply the transformation of values into market-prices, and to the extent that they proceed on a capitalist basis, to the extent that the commodities are products of capital, they are based on capitalist processes, that is, on quite different and more complicated conditions than the mere purchase and sale of goods. In these capitalist processes it is not a question of the formal conversion of the value of commodities, into prices, not a question of a mere change of form. It is a matter of definite differences in quantity between market-prices and market-values, and, further, prices of production. In simple purchases and sales, it is enough to consider merely the producers of articles as such. But supply and demand, in a wider analysis, imply the existence of different classes and sections of classes which divide the total revenue of society among themselves and consume it as revenue among themselves, which, therefore, constitute the demand in the form of revenue. On the other hand, the attempt to grasp the question of the supply and demand among the producers as such requires an analysis of the total conformation of the capitalist process of production.

Under capitalist production it is not a question of merely throwing a certain mass of values into circulation and exchanging that mass for equal values in some other form, whether of money or other commodities, but it is also a ques-

[32] "If each man of a class could never have more than a given share, or aliquot part of the gains and possessions of the whole, he would readily combine to raise the gains" (he does it as soon as the proportion of demand to supply permits it); "this is monopoly. But where each man thinks that he may any way increase the absolute amount of his own share, though by a process which lessens the whole amount, he will often do it; this is competition." An Inquiry into those Principles respecting the Nature of Demand, etc. London, page 105.

tion of advancing capital in production and realising on it as much surplus-value, or profit, in proportion to its magnitude, as any other capital of the same or of other magnitudes in whatever line of production. It is a question, then, of selling the commodities at least at prices which will yield the average profit, in other words, at prices of production. Capital comes in this form to a realisation of the social nature of its power, in which every capitalist participates in proportion to his share in the total social capital.

In the first place, capitalist production is essentially indifferent to the particular use-value, or the peculiarity, of any commodity produced by it. In every sphere of production it is the sole purpose of production to secure surplus-value, to appropriate in the product of labor a certain quantity of unpaid labor. And it is likewise the nature of the wage-labor subject to capital to be indifferent to the specific character of its labor, to transform itself in accord with the requirements of capital, and to submit to being transferred from one sphere of production to another.

In the second place, one sphere of production is now as good or as bad as another. Every one of them yields the same profit, and every one of them would be useless, if the commodities produced by them did not satisfy some social need.

Now, if the commodities are sold at their values, then, as we have shown, considerably different rates of profit arise in the various spheres of production, according to the different organic composition of the masses of capital invested in them. But capital withdraws from spheres with low rates of profit and invades others which yield a higher rate. By means of this incessant emigration and immigration, in one word, by its distribution among the various spheres in accord with a rise of the rate of profit here, and its fall there, it brings about such a proportion of supply to demand that the average profit in the various spheres of production becomes the same, so that values are converted into prices of production. This equilibration is accomplished by capital in a more or less perfect degree to the extent that capitalist development is ad-

vanced in a certain nation, in other words, to the extent that conditions in the respective countries are adapted to the capitalist mode of production. As capitalist development proceeds, it develops also its own peculiar conditions and subjects to its specific character and its immanent laws all the social requirements on which the process of production is based.

The incessant equilibration of the continual differences is accomplished so much quicker, 1), the more movable capital is, the easier it can be shifted from one sphere and one place to another; 2) the quicker labor-power can be transferred from one sphere to another and from one local point of production to another. The first condition implies complete freedom of trade in the interior of society and the removal of all monopolies with the exception of those which naturally arise out of the capitalist mode of production. It implies, furthermore, the development of the credit-system, which concentrates the inorganic mass of the disposable social capital instead of leaving it in the hands of individual capitalists. Finally it implies a subordination of the various spheres of production to the control of capitalists. This last implication is of itself included in the assumption that it is a question of a transformation of values into prices of production in all capitalistically exploited spheres of production. But this equilibration meets great obstacles, whenever numerous and large spheres of production, which are not operated on a capitalistic basis (such as farming by small farmers), are interpolated between the capitalist spheres and interrelated with them. A great density of population is also a requirement.— The second condition implies the abolition of all laws which prevent the laborers from moving from one sphere of production to another and from one local center of production to another; an indifference of the laborer to the nature of his labor; the greatest possible reduction of labor in all spheres of production to simple labor; the elimination of all craft prejudices among laborers; and last, not least, a subjugation of the laborer under the capitalist mode of production. More detailed statements concerning these points belong in a special analysis of competition.

It follows from the foregoing that the individual capitalist as well as the capitalists as a whole in each particular sphere of production are participants in the exploitation of the total working class by the total capital, and in the degree of that exploitation, not only out of general class sympathy, but also for direct economic reasons, because, assuming all other conditions, among them the value of the advanced constant capital, to be given, the average rate of profit depends on the intensity of exploitation of the total labor by the total capital.

The average profit coincides with the average surplus-value produced for each 100 of capital, and so far as the surplus-value is concerned, the foregoing statements apply as a matter of course. In the determination of the rate of profit, the value of the advanced capital becomes an additional element. In fact, the direct interest taken by the capitalist, or the capital, of any individual sphere of production in the exploitation of the laborers directly employed by him, or it, is limited to the endeavor to make an extra gain, a profit exceeding the average, either by exceptional overwork, or by a reduction of wages below the average, or by an exceptional productivity of labor. Aside from this, a capitalist who would not employ any variable capital, and therefore no laborers (an exaggerated assumption), would be as much interested in the exploitation of the working class by capital, and would derive his profit quite as much from unpaid surplus-labor, as a capitalist who would employ only variable capital (another exaggeration), and who would invest his entire capital in wages. The degree of exploitation of labor depends on the average intensity of labor, if the working day is given, and on the length of the working day, if the average intensity of exploitation is given. The degree of exploitation of labor determines the size of the rate of surplus-value, and therefore the size of the mass of surplus-value for a given total mass of variable capital, and consequently the magnitude of the profit. The individual capitalist, as distinguished from his sphere, has the same special interest in the exploitation of the laborers personally employed by him that the capital of a certain

sphere, as distinguished from the total social capital, has in the exploitation of the laborers directly employed by it.

On the other hand, every particular sphere of capital, and every individual capitalist, has the same interest in the productivity of the social labor employed by the total capital. For two things depend on this productivity: In the first place, the mass of use-values by which the average profit is expressed; and this is doubly important, where this average profit serves as a fund for the accumulation of new capital and as a fund for revenue to be spent in enjoyment. In the second place, the amount of the value of the total capital invested (constant and variable), which, with a given amount of surplus-value, or profit, for the whole capitalist class, determines the rate of profit, or the profit on a certain percentage of capital. The special productivity of labor in any particular sphere, or in any individual business of this sphere, interests only those capitalists who are directly engaged in it, since it enables that particular sphere, or that individual capitalist, to make an extra profit over that of the total capital.

Here, then, we have the mathematically exact demonstration, how it is that the capitalists form a veritable freemason society arrayed against the whole working class, however much they may treat each other as false brothers in the competition among themselves.

The price of production includes the average profit. We call it price of production. It is, as a matter of fact, the same thing which Adam Smith calls *natural price,* Ricardo *price of production,* or *cost of production,* and the physiocrats *prix nécessaire,* because it is in the long run a prerequisite of supply, of the reproduction of commodities in every individual sphere.[33] But none of them has revealed the difference between price of production and value. We can well understand, then, why these same economists, who always resist a determination of the value of commodities by labor-time, by the quantity of labor contained in them, always speak of prices of production as centers, around which market-prices fluctu-

[33] Malthus.

ate. They can afford to do that, because the price of production is an utterly external and, at first glance, meaningless form of the value of commodities, a form as seen in competition and thus reflected in the mind of the vulgar capitalist, and consequently in that of the vulgar economists.

Our analysis resulted in the discovery that the market-value (and everything said concerning it applies with the necessary modifications to the price of production) implies a surplus-profit for those who produce in any particular sphere of production under the most favorable conditions. With the exception of crises, and of over-production in general, this applies to all market-prices, no matter how much they may deviate from market-values or market-prices of production. For the market-price signifies that the same price is paid for commodities of the same kind, although they may have been produced under very different individual conditions and may have considerably different cost-prices. (We do not speak at this point of any surplus-profits due to monopolies in the strict meaning of the term, whether they are artificial or natural.)

A surplus-profit may also arise, when certain spheres of production are in a position to evade the conversion of the values of their commodities into prices of production, and thus a reduction of their profits to the average profit. We shall devote more attention to the further modifications of these two forms of surplus-profit in the part dealing with ground-rent.

CHAPTER XI.

EFFECTS OF GENERAL FLUCTUATIONS OF WAGES ON PRICES OF PRODUCTION.

Let the average composition of social capital be 80 c + 20 v, with a profit of 20%. The rate of surplus-value is then 100%. A general increase of wages, all other things remaining the same, is a reduction of the rate of surplus-value. In

the case of the average capital, profit and surplus-value are identical. Let wages rise by 25%. Then the same quantity of labor, which was formerly set in motion with 20, costs 25. Instead of 80 c + 20 v + 20 p, we have then for the value of one turn-over 80 c + 25 v + 15 p. The labor set in motion by the variable capital still produces a value of 40, the same as before. If v rises from 20 to 25, then the surplus p, or s. amounts only to 15. The profit of 15 on a capital of 105 is $14\frac{2}{7}$%, and this would be the new average rate of profit. Since the price of production of the commodities produced by the average capital coincides with their value, the price of production of these commodities would remain unchanged. The raising of wages would have brought about a reduction of profits, but no change in the value and price of the commodities.

Formerly, so long as the average profit was 20%, the price of production of the commodities produced in one period of turn-over was equal to their cost-price plus a profit of 20% on this cost-price, in other words $k + kp' = k + \frac{20\,k}{100}$. In this formula k is a variable magnitude, changing according to the value of the means of production which are incorporated in the commodities, and according to the amount of wear transferred from the fixed capital to the product. Now the price of production would amount to $k + \frac{14\,2\cdot7\,k}{100}$.

Now let us first select a capital, whose composition is lower than the original composition of the average social capital of 80 c + 20 v (which has now been transformed into $76\frac{4}{21}$ c + $23\frac{17}{21}$ v), for instance a capital of 50 c + 50 v. In this case, the price of production of the annual product, assuming for the sake of simplicity that the entire fixed capital passes through wear into the product and that the time of turn-over is the same as that in the first case, would have been 50 c + 50 v + 20 p, or 120, before the raising of wages. A raising of wages by 25% means for the same quantity of labor a raising of the variable capital from 50 to $62\frac{1}{2}$. If the annual product were sold at the former price of production of 120, then we should have the formula 50 c + $62\frac{1}{2}$ v + $7\frac{1}{2}$ p, or a rate of profit of $6\frac{2}{3}$%. But the new average rate of

profit is $14\frac{2}{7}\%$, and since we assume all other circumstances to remain the same, this capital of $50\,c + 62\frac{1}{2}\,v$ will also have to make this profit. Now, a capital of $112\frac{1}{2}$ makes a round profit of $16\frac{1}{12}$ at a rate of profit of $14\frac{2}{7}\%$. Therefore the price of production of the commodities produced by this capital is now $50\,c + 62\frac{1}{2}\,v + 16\frac{1}{12}p = 128\frac{7}{12}$. In consequence of a raise in wages of 25%, the price of production of the same quantity of the same commodities has risen from 120 to $128\frac{7}{12}$, or more than 7%.

Vice versa, let us select a sphere of production of a higher composition than the average capital, for instance a capital of $92\,c + 8\,v$. The original average profit in this case would still be 20, and if we assume once more that the entire fixed capital passes into the annual product, and that the time of turn-over is the same as in the first and second case, the price of production of the commodities is also 120.

In consequence of the rise of wages by 25% the variable capital for the same quantity of labor rises from 8 to 10, the cost-price of the commodities from 100 to 102, while the average rate of profit has fallen from 20% to $14\frac{2}{7}\%$. Now $100 : 14\frac{2}{7} = 102 : 14\frac{4}{7}$ (approximately). The profit now falling to the share of 102 is $14\frac{4}{7}$. Therefore the total product sells at $k + kp'$, or $102 + 14\frac{4}{7}$, or $116\frac{4}{7}$. The price of production has fallen from 120 to $116\frac{4}{7}$, or more than 3%.

Consequently, if wages are raised by 25%,

1) the price of production of the commodities of a capital of average composition is not changed;

2) the price of production of the commodities of a capital of lower composition rises, but not in the same proportion in which the profit falls;

3) the price of production of the commodities of a capital of higher composition falls, but not as much as the profit.

Since the price of production of the commodities of the average capital remains the same and equal to the value of the product, it follows that the sum of the prices of production of the products of all capitals remain the same and equal to the sum of the values produced by the total social capital. The increase on one side is balanced by the decrease on the

other and the level of the average social capital maintained for the total social capital.

Seeing that the price of production in the second illustration rises, while it falls in the third, it is evident that these opposite effects brought about by a fall in the rate of surplus-value or by a general rise of wages that there is no prospect of any compensation in the price for the rise in wages, since the fall of the price of production in No. III cannot very well compensate the capitalist for the fall in the profit, and since the rise of the price in No. II does not prevent a fall in profit. On the contrary, in either case, whether the price rises or falls, the profit remains the same as that of the average capital whose price remains unchanged. It is the same average profit, which has fallen by 5%, or about 25%, in the case of II as well as III. It follows from this, that if the price did not rise in II and fall in III, II would have to sell below and III above the new, recently reduced, average profit. It is quite evident that a rise of wages must affect a capitalist who has invested one-tenth of his capital in wages differently from one who has invested one-fourth or one-half, according to whether 50, 25, or 10 per hundred of capital are advanced for wages. An increase in the price of production on one side, and a fall on the other, according to whether a capital is below or above the average social composition, is effected only by leveling to the new reduced average profit. It is clear that, when in consequence of the establishment of a general rate of profit for the capitals of lower composition (those wherein v is above the average) the values are lowered by their transformation into prices of production, but the values for the capitals of higher composition will be increased.

Now, how would a general fall of wages, and a corresponding general rise of the rate of profit, and thus of the average profit, affect the prices of production of commodities produced by capitals diverging in opposite directions from the average social composition? We have but to reverse the foregoing statements, in order to find the answer (which Ricardo did not analyse).

I. Average capital 80 c + 20 v = 100; rate of surplus-value 100%; price of production = value of commodities = 80 c + 20 v + 20 p = 120; rate of profit 20%. Let wages fall by one-fourth. Then the same constant capital is set in motion by 15 v, instead of 20 v. We have then as the value of commodities 80 c + 15 v + 25 p = 120. The quantity

of labor employed by v remains the same, only the newly created value is differently distributed between the capitalist and the laborers. The surplus-value increases from 20 to 25, and the rate of surplus-value from $\frac{20}{20}$ to $\frac{25}{15}$, in other words, from 100% to $166\frac{2}{3}$%. The profit on 95 is now 25, so that the rate of profit per 100 is $26\frac{6}{19}$. The composition of the capital in percentages is now $84\frac{4}{19} + 15\frac{15}{19} = 100$.

II. Lower composition. Original composition, as above, 50 c + 50 v. By the fall of wages by one-fourth v is reduced to $37\frac{1}{2}$, and consequently the advanced total capital to 50 c + $37\frac{1}{2}$ v = $87\frac{1}{2}$. Applying to this the new rate of profit of $26\frac{6}{19}$%, we get $100 : 26\frac{6}{19} = 87\frac{1}{2} : 23\frac{1}{8}$. The same mass of commodities which formerly cost 120, now costs $87\frac{1}{2} + 23\frac{1}{8}$ = $100\frac{15}{19}$. A fall in prices of almost 10%.

III. Higher composition. Original composition 92 c + 8 v = 100. The fall in wages by one-fourth reduces 8 v to 6 v, and the total capital to 98. Consequently $100 : 26\frac{6}{19} = 98 : 25\frac{15}{19}$. The price of production of the commodities, formerly 100 + 20 = 120, is now, after the fall in wages, 98 + $25\frac{15}{19} = 123\frac{15}{19}$. A rise by almost 4%.

We see, then, that we have but to follow the preceding development in the opposite direction with the necessary, modifications; that a general fall of wages carries with it a general rise of surplus-value, of the rate of surplus-value, and, other circumstances remaining the same, also of the rate of profit, although expressed by different proportions; a fall in the prices of production for the commodities produced by capitals of lower composition, a rise in the prices of production for commodities produced by capitals of higher composition. The result is just the reverse of that following a general rise of wages.[34] In both cases, whether of a rise or a fall, the assumption is that the working day remains the same, also the prices of the means of subsistence. Under these circum-

[34] It is very peculiar that Ricardo (who naturally proceeds differently from us, since he did not understand the compensation of values to prices of production) did not even think of this eventuality, but considered only the first case, that of a rise of wages and its influence on the prices of production of commodities. And the servile herd of imitators did not even make an attempt to advance so much as to apply the practical, or even tautological, test.

stances, a fall in wages is possible only, if wages stood higher than the normal price of labor, or if they are depressed below this price. The way in which this condition is modified, if the rise or fall of wages is due to a change in value, and consequently in the price of production of commodities usually consumed by the laborer, will be to a certain extent analysed in the part dealing with ground-rent. At this place we make for once and all the following statements:

If a rise or fall in wages is due to a change in the value of the necessities of life, then a modification of the above findings can take place only to the extent that the commodities, whose variation of price raises or lowers the variable capital, pass also as constituent elements into the constant capital and consequently do not affect wages alone. But to the extent that they affect only wages, the above analysis contains all that needs to be said.

In this entire chapter, it is assumed as a fact that there are in existence a general rate of profit, an average profit, and a conversion of values into prices of production. The question was merely in what manner a general rise or fall in wages affected the prices of production of commodities, which were assumed to exist. This is but a very secondary question compared with the important points analysed in this part. But it is the only relevant question treated by Ricardo, and we shall see that he treated even this but onesidedly and imperfectly.

CHAPTER XII.

SOME AFTER REMARKS.

I. *Causes Implying a Variation of the Price of Production.*

The price of production of a commodity can vary only from two causes:

1) The average rate of profit varies. This can be due only to a change in the average rate of surplus-value, or, if the average rate of surplus-value remains the same, by a change

in the proportion of the sum of the appropriated surplus-values to the sum of the advanced total capital of society.

Unless a variation of the rate of surplus-value is due to a depression of wages below normal, or their rise above normal, — and such movements must be considered as mere oscillations — it can take place only for two reasons: Either the value of labor-power may have risen or fallen. The one eventuality is as impossible as the other without a change in the productivity of that labor which produces means of subsistence, in other words, without a change in the value of the commodities which are consumed by the laborer. Or, the proportion of the sum of appropriated surplus-values to the advanced total capital of society varies. Since the variation in this case is not due to the rate of surplus-value, it must be due to the total capital, or rather to its constant part. The mass of this part, technically speaking, increases or decreases in proportion to the quantity of labor-power bought by the variable capital, and the mass of its value increases or decreases with the increase or decrease of its own mass. Its mass of value, then, increases or decreases likewise in proportion to the mass of the value of the variable capital. If the same labor sets more constant capital in motion, labor has become more productive. If less, less productive. There has then been a change in the productivity of labor, and a change must have taken place in the value of certain commodities.

The following rule, then, applies to both cases: If the price of production of a certain commodity changes in consequence of a change in the average rate of profit, its own value may have remained unchanged, but a change must have taken place in the value of other commodities.

2) The average rate of profit remains unchanged. In that case the price of production of a commodity cannot change, unless its own value has changed. This may be due to the fact that more or less labor is required to produce this commodity, either because the productivity of that labor varies, which produces this commodity in its final form, or of that labor which produces the commodities consumed in its production. Cotton yarn may vary in its price of production, either

because cotton is produced at a lower figure, or because the labor of spinning has become more productive in consequence of improved machinery.

As we have seen before, the price of production is equal to $k + p$, equal to cost-price plus profit. This implies $k + kp'$, and k, cost-price, stands here for a variable magnitude, which changes according to different spheres of production, but is everywhere equal to the value of the constant and variable capital consumed in the production of commodities, while p' stands for the percentage of the average rate of profit. If $k = 200$, and $p' = 20\%$, the price of production $k + kp'$ is equal to $200 + 200\frac{20}{100} = 200 + 40 = 240$. It is evident that this price of production may remain the same, although the value of the commodities may change.

All changes in the price of production of commodities reduce themselves in the last analysis to changes in value. But not every change in the value of commodities needs to find expression in a change of the price of production. For this price is not determined merely by the value of any particular commodity, but by the aggregate value of all commodities. A change in commodity A may eventually be balanced by an opposite change of commodity B, so that the general proportion remains the same.

II. *Price of Production of Commodities of Average Composition.*

We have seen that a deviation of the prices of production from the values may be brought about by the following means:

1) By adding to the cost-price of a commodity, not the surplus-value contained in it, but the average profit.

2) By transferring a price of production, which thus differs from the value of some particular commodity, to the cost-price of some other commodity which consumes the first commodity as one of its elements, so that the cost-price of a certain commodity may already contain a deviation from the value of the means of production consumed by it, quite aside from the deviation, which it may still experience on its own

account through a difference between the average profit and the surplus-value.

It is therefore possible that the cost-price may differ from the sum of the values of those elements which make up this portion of the price of production, even in the case of commodities produced by capitals of average composition. Take it that the average composition is 80 c + 20 v. Now it is possible that in the actual capitals of this composition 80 c may be greater or smaller than the value of c, the constant capital, because this c may be made up of commodities whose price of production differs from their value. In the same way 20 v might differ from its value, if the laborer consumes commodities whose price of production differs from their value, in which case the laborer would work a longer or shorter time for their reproduction, and would thus perform more or less necessary labor, then would be required, if the price of production of the necessities of life coincided with their value.

However, this possibility does not alter the correctness of the rules laid down for commodities of average composition. The quantity of profit falling to the share of these commodities is equal to the quantity of surplus-value contained in them. For instance, the most important point in a capital of the above composition, 80 c +20 v, so far as the determination of surplus-value is concerned, is not whether these figures are expressions of actual values, but whether this represents their actual proportion to one another, in other words, whether v is one-fifth, and c four-fifths, of the total capital, Whenever this is actually the case, as was assumed above, then the surplus-value produced by v is equal to the average profit. On the other hand, seeing that this surplus-value is equal to the average profit, the price of production, or cost-price plus profit, k + p, is equal to k + s, that is, practically equal to the value of these commodities. This implies that a rise or a fall in wages would not change the price of production, k + p, any more than it would change the value of these commodities. It would merely effect a corresponding opposite movement on the side of profit, a fall or a rise. For

if a rise or a fall of wages were to bring about a change in the price of commodities of average composition, then the rate of profit in these spheres of average composition would rise above, or fall below, the level it holds in other spheres. The sphere of average composition maintains the same level of profit as the other spheres only so long as the price remains unchanged. The practical result in the case of this sphere of average composition is the same as though its products were sold at their value. For if commodities are sold at their actual values, it is evident that, other circumstances remaining equal, a rise or a fall in wages will cause a corresponding fall or rise in profits, but no change in the value of commodities, and that under all circumstances a rise or a fall in wages can never affect the value of commodities, but only the magnitude of the surplus-value.

III. *Fluctuations for which the Capitalist makes Allowance.*

It has been said that competition levels the rates of profit of the different spheres of production into an average rate of profit and thereby transforms the values of the products of these different spheres into prices of production. This is accomplished by continually transferring capital from one sphere to another, in which the profit happens to stand above the average for the moment. The fluctuations of profit due to the cycle of fat and lean years, following each other in any given line of industry during given periods, must be taken into consideration, of course. These incessant emigrations and immigrations of capital, which take place between the different spheres of production, create rising and falling movements of the rate of profit. These movements balance one another more or less and thereby create a tendency to reduce the rate of profit everywhere to the same common and universal level.

This movement of capitals is caused primarily by the stand of the market-prices, which lift profits above the level of the universal average in one place and depress them below it in another. We leave out of consideration, for the present,

merchant's capital. We know from the sudden paroxysms of speculation in certain favorite articles that this merchants' capital can draw masses of capital from a certain line of business with extraordinary rapidity and throw them with equal rapidity into another. But we have nothing to do with merchants' capital at this place. So far as the sphere of actual production is concerned, that is, industries, agriculture, mining, etc., the transfer of capital from one sphere to another offers considerable difficulty, particularly on account of the existing fixed capital. Moreover, experience demonstrates that, if a certain line of industry, for instance the cotton industry, yields extraordinary profits at one period, it suffers losses, or makes very little profit, at some other period, so that the average profit within a certain cycle of years is pretty much the same as in other lines. And capital soon learns to take this experience into account.

What competition does *not* show is the way in which value is determined and the movement of production dominated by this determination. It does not show the values that stand behind the prices of production and determine them in the last instance. Competition *does* show, on the other hand, the following things: 1) The average profits independent of the organic composition of capital in the different spheres of production, and therefore also independent of the mass of living labor appropriated by any given capital in any particular sphere of exploitation. 2) A rise and fall of prices of production as a result of changes in the level of wages, a phenomenon which flatly contradicts at first sight the law of value of commodities. 3) The fluctuations of market-prices, which reduce the average market-price of commodities in a given period of time, not to the *market-value*, but to a *market-price of production* differing considerably from this market-value. All these phenomena *seem* to contradict the determination of value by labor-time as much as the fact that surplus-value consists of unpaid surplus-labor. *Everything appears upside down in competition.* The existing conformation of economic conditions, as seen in reality on the surface of things, and consequently in the conceptions which the

leading human agents of these conditions form in trying to understand them, are not only different from the internal and disguised essence of these conditions, and from the conceptions corresponding to this essence, but actually opposed to them, or their reverse.

Furthermore, as soon as capitalist production has reached a certain degree of development, the reduction of the different rates of profit of the individual spheres to the level of the average rate of profit no longer proceeds solely by virtue of the play of attraction and repulsion, by which the market-prices attract or repel capital. After the average prices, and the market-prices corresponding to them, have become stable for a time, the capitalists become conscious of the fact that this leveling process balances definite differences. And then they allow for these differences in their mutual calculations. The differences exist in the consciousness of the capitalists and are taken into consideration as fluctuations for which allowance must be made.

At the bottom of all conceptions lies that of the average profit, to-wit, that capitals of the same magnitude must yield the same profits in the same time. This, again, is based on the assumption that the capital of each sphere of production shares in the total profit squeezed out of the laborers by the total social capital in proportion to its magnitude; or, that every individual capital should be regarded merely as a part of the total social capital, and every capitalist as a shareholder in the total social enterprise, each sharing in the total profit in proportion to the magnitude of his share of capital.

These conceptions serve as a basis for the calculations of the capitalist, for instance the assumption that a capital which is turned over more slowly than another, because its commodities require a longer time for their production, or because they must be sold in more remote markets, should nevertheless charge the profit it loses in this way and reimburse itself by putting up the price. Another idea is that capitals invested in lines which are exposed to considerable danger, for instance in shipping, should be compensated by a raise in prices. As soon as capitalist production, and the insurance

business, are developed, the danger is equalised for all spheres of production (see Corbett); but the capitals invested in more than ordinarily dangerous enterprises have to pay higher insurance rates and recover them in the prices of their commodities. All this amounts in practice to saying that every circumstance (and all of them are considered equally necessary within certain limits), which renders one line of production profitable, and another less, are calculated as legitimate grounds for compensation, without requiring the ever renewed action of competition to demonstrate the justification of such claims. The capitalist simply forgets, or rather he does not see, because competition does not show it to him, that all these claims for compensation mutually advanced by the capitalists in the calculation of the prices of commodities of different lines of production repeat in another way the idea that all capitalists are entitled, in proportion to the magnitude of their respective capitals, to equal shares of the common loot, the total surplus-value. They are rather under the impression, seeing that the profit pocketed by them differs from the surplus-value appropriated by them, that those grounds for compensation do not equalise their participation in the total surplus-value, but that they rather create the profit itself, which is supposed to originate in an addition to the price of their commodities, for which they advance different excuses.

In other respects the statements made in chapter VII concerning the assumptions of the capitalists as to the source of surplus-value apply also in this instance. The present case differs a little from those in chapter VII, but only to the extent that a saving in cost price depends on individual ability, attention to business, etc., assuming the market price of commodities and the degree of exploitation of labor to be given.

PART III.

THE LAW OF THE FALLING TENDENCY OF THE RATE OF PROFIT.

CHAPTER XIII.

THE THEORY OF THE LAW.

With a given wage and working day, a certain variable capital, for instance of 100, represents a certain number of employed laborers. It is the index of this number. For instance, let 100 p.st. be the wages of 100 laborers for one week. If these laborers perform the same amount of necessary as of surplus-labor, in other words, if they work daily as much time for themselves as they do for the capitalist, or, in still other words, if they require as much time for the reproduction of their wages as they do for the production of surplus-value for the capitalist, then they would produce a total value of 200 p.st., and the surplus-value would amount to 100 p.st. The rate of surplus-value, $\frac{s}{V}$, would be 100%. But we have seen that this rate of surplus-value would express itself in considerably different rates of profit, according to the different volumes of constant capitals c and consequently of total capitals C. For the rate of profit is calculated by the formula $\frac{s}{C}$.

Take it that the rate of surplus-value is 100%. Now, if

c = 50, and v = 100, then $p' = \frac{100}{150}$, or $66\frac{1}{3}$%.
c = 100, and v = 100, then $p' = \frac{100}{200}$, or 50 %.
c = 200, and v = 100, then $p' = \frac{100}{300}$, or $33\frac{1}{3}$%.
c = 300, and v = 100, then $p' = \frac{100}{400}$, or 25 %.
c = 400, and v = 100, then $p' = \frac{100}{500}$, or 20 %.

In this way, the same rate of surplus-value, with the same degree of labor exploitation, would express itself in a falling rate of profit, because the material growth of the constant capital, and consequently of the total capital, implies their growth in value, although not in the same proportion.

If it is furthermore assumed that this gradual change in the composition of capital is not confined to some individual spheres of production, but occurs more or less in all, or at least in the most important ones, so that they imply changes in the organic average composition of the total capital of a certain society, then the gradual and relative growth of the constant over the variable capital must necessarily lead to *a gradual fall of the average rate of profit,* so long as the rate of surplus-value, or the intensity of exploitation of labor by capital, remain the same. Now we have seen that it is one of the laws of capitalist production that its development carries with it a relative decrease of variable as compared with constant capital, and consequently as compared to the total capital, which it sets in motion. This is only another way of saying that the same number of laborers, the same quantity of labor-power set in motion by a variable capital of a given value, consume in production an ever increasing quantity of means of production, such as machinery and all sorts of fixed capital, raw and auxiliary materials, and consequently a constant capital of ever increasing value and volume, during the same period of time, owing to the peculiar methods of production developing within the capitalist system. This progressive relative decrease of the variable capital as compared to the constant, and consequently to the total, capital is identical with the progressive higher organic composition of the average social capital. It is, in another way, but an expression of the progressive development of the productive powers of society, which is manifested by the fact that the same number of laborers, in the same time, convert an ever growing quantity of raw and auxiliary materials into products, thanks to the growing application of machinery and fixed capital in general, so that less labor is needed for the production of the same, or of more, commodities. This growing value and volume of con-

stant capital corresponds to a progressive cheapening of products, although the increase in the value of the constant capital indicates but imperfectly the growth in the actual mass of use-values represented by the material of the constant capital. Every individual product, taken by itself, contains a smaller quantity of labor than the same product did on a lower scale of production, in which the capital invested in wages occupies a far greater space compared to the capital invested in means of production. The hypothetical series placed at the beginning of this chapter expresses, therefore, the actual tendency of capitalist production. This mode of production produces a progressive decrease of the variable capital as compared to the constant capital, and consequently a continuously rising organic composition of the total capital. The immediate result of this is that the rate of surplus-value, at the same degree of labor-exploitation, expresses itself in a continually falling average rate of profit. (We shall see later why this fall does not manifest itself in an absolute form, but rather as a tendency toward a progressive fall.) This progressive tendency of the average rate of profit to fall is, therefore, but a peculiar expression of capitalist production for the fact that the social productivity of labor is progressively increasing. This is not saying that the rate of profit may not fall temporarily for other reasons. But it demonstrates at least that it is the nature of the capitalist mode of production, and a logical necessity of its development, to give expression to the average rate of surplus-value by a falling rate of average profit. Since the mass of the employed living labor is continually on the decline compared to the mass of materialised labor incorporated in productively consumed means of production, it follows that that portion of living labor, which is unpaid and represents surplus-value, must also be continually on the decrease compared to the volume and value of the invested total capital. Seeing that the proportion of the mass of surplus-value to the value of the invested total capital forms the rate of profit, this rate must fall continuously.

Simple as this law appears from the foregoing statements, all of political economy has so far tried in vain to discover it,

as we shall see later on. The economists saw the problem and cudgeled their brains in tortuous attempts to interpret it. Since this law is of great importance for capitalist production, it may be said to be that mystery whose solution has been the goal of the entire political economy since Adam Smith. The difference between the various schools since Adam Smith consists in their different attempts to solve this riddle. If we consider, on the other hand, that political economy up to the present has been tinkering with the distinction between constant and variable capital without ever defining it accurately; that it never separated surplus-value from profit, and never even considered profit in its purely theoretical form, that is, separated from its different subdivisions, such as industrial profit, commercial profit, interest, ground rent; that it never thoroughly analyzed the differences in the organic composition of capital, and for this reason never thought of analyzing the formation of an average rate of profit; if we consider all this, we no longer wonder at its failure to solve the riddle.

We intentionally analyze first this law, before we pass on to a consideration of the different independent categories into which profit is subdivided. The fact that this analysis is made independently of the subdivisions of profit, which fall to the share of different categories of persons, shows in itself that this law, in its general workings, is independent of those subdivisions and of the mutual relations of the resulting categories of profit. The profit to which we are here referring is but another name for surplus-value itself, which is merely observed in its relation to the total capital, instead of its relation to the variable capital from which it arises. The fall in the rate of profit therefore expresses the falling relation of surplus-value itself to the total capital, and is for this reason independent of any division of this profit among various participants.

We have seen that a certain stage of capitalist development, in which the organic composition of capital, c : v shows the proportion of 50 : 100, expresses a rate of surplus-value of 100% by a rate of profit of $66\frac{2}{3}\%$, and that a higher stage, in

which c : v shows the proportion 400 : 100, expresses the same rate of surplus-value by a rate of profit of only 20%. What is true of different successive stages in the same country, is also true of different contemporaneous stages of development in different countries. In an undeveloped country, in which the first-named composition of capital is the rule, the average rate of profit would be $66\frac{2}{3}\%$, while in a country with the other, higher, stage of development, the average rate of profit would be 20%.

The difference between two national rates of profit might be eliminated, or even reversed, if labor were less productive in the less developed country, so that a larger quantity of labor would be incorporated in a smaller quantity of the same commodities, a larger exchange-value represented by a smaller use-value, so that the laborer would consume a larger portion of his time in the reproduction of his own means of subsistence, or of their value, and have less time to spare for the production of surplus-value, and consequently would perform less surplus-labor, so that the rate of surplus-value would be lower. For instance, if the laborer of the less developed country were to work two-thirds of the working day for himself, and one-third for the capitalist, then, referring to the above illustration, the same labor-power would be paid with $133\frac{1}{3}$ and would furnish a surplus of only $66\frac{2}{3}$. A constant capital of 50 would correspond to a variable capital of $133\frac{1}{3}$. The rate of surplus-value would then amount to $133\frac{1}{3} : 66\frac{2}{3} = 50\%$, and the rate of profit to $183\frac{1}{3} : 66\frac{2}{3} =$ about $36\frac{1}{2}\%$.

Since we have not analysed the different subdivisions of profit, so that they do not exist for the present so far as we are here concerned, we make the following preliminary remarks merely in order to prevent misunderstanding: It would be a mistake to measure the level of the national rate of profit by, say, the level of the national rate of interest, when comparing countries in different stages of development, especially when comparing countries with a developed capitalist production to countries, in which labor has not yet been fully subjected to capital, although the laborer may already

be exploited by the capitalist, as happens, for instance, in India, where the ryot manages his farm as an independent producer, whose production, strictly so called, is not yet under the complete sway of capital, although the usurer may not only rob him of his entire surplus-labor by means of interest, but also curtail his wages, to use a capitalist term. For the interest of such stages comprises all of the profit, and more than the profit, instead of merely expressing an aliquot part of the produced surplus-value, or profit, as it does in countries with a developed capitalist production. On the other hand, the rate of interest in capitalist countries is overwhelmingly determined by conditions (loans granted by usurers to owners of large estates who draw ground-rent) which have nothing to do with profit, but which merely indicate to what extent usury appropriates ground-rent.

In countries with capitalist production in different stages of development, and consequently with capitals of different organic composition, a country with a short normal working day may have a higher rate of surplus-value (the one factor which determines the rate of profit) than a country with a long normal working day. In the first place, if the English working day of 10 hours, on account of its higher intensity, is equal to an Austrian working day of 14 hours, then dividing the working day equally in both instances, 5 hours of English surplus-labor may represent a greater value on the world-market than 7 hours of Austrian surplus-labor. In the second place, a larger portion of the English working day may represent surplus-labor than of the Austrian working day.

The law of the falling tendency of the rate of profit, which is the expression of the same, or even of a higher, rate of surplus-value, says in so many words: If you take any quantity of the average social capital, say a capital of 100, you will find that an ever larger portion of it is invested in means of production, and an ever smaller portion in living labor. Since, then, the aggregate mass of the living labor operating the means of production decreases in comparison to the value of these means of production, it follows that the unpaid labor, and that portion of value in which it is expressed, must de-

cline as compared to the value of the advanced total capital. Or, an ever smaller aliquot part of the invested total capital is converted into living labor, and this capital absorbs in proportion to its magnitude less and less surplus-labor, although the proportion of the unpaid part of the employed labor may simultaneously grow as compared with the paid part. The relative decrease of the variable, and the relative increase of the constant, capital, while both parts may grow absolutely in magnitude, is but another expression for the increased productivity of labor.

Let a capital of 100 consist of 80 c + 20 v, and let the 20 v stand for 20 laborers. Let the rate of surplus-value be 100%, that is to say, the laborers work one-half of the day for themselves and the other half for the capitalist. Now take a less developed country, in which a capital of 100 is composed of 20 c + 80 v, and let these 80 v stand for 80 laborers. But let these laborers work two-thirds of the day for themselves, and only one-third for the capitalists. Assuming all other things to be equal, the laborers in the first case will produce a value of 40, while those in the second case will produce a value of 120. The first capital produces 80 c + 20 v + 20 s = 120; rate of profit 20%. The second capital produces 20 c + 80 v + 40 s = 140; rate of profit 40%. In other words, the rate of profit in the second case is double that of the first case, and yet the rate of surplus-value in the first case is 100%, while it is only 50% in the second case. But a capital of the same magnitude appropriates in the first case the surplus-labor of only 20 laborers, while it appropriates that of 80 laborers in the second case.

The law of the falling tendency of the rate of profit, or of the relative decline of the appropriated surplus-labor compared to the mass of materialised labor set in motion by living labor does not argue in any way against the fact that the absolute mass of the employed and exploited labor set in motion by the social capital, and consequently the absolute mass of the surplus-labor appropriated by it, may grow. Nor does it argue against the fact that the capitals controlled by individual capitalists may dispose of a growing mass of labor

and surplus-labor, even though the number of the laborers employed by them may not grow.

Take for illustration's sake a certain population of working people, for instance, two millions. Assume, furthermore, that the length and intensity of the average working day, and the level of wages, and thereby the proportion between necessary and surplus-labor, are given. In that case the aggregate labor of these two millions, and their surplus-labor expressed in surplus-value, represent always the same magnitude of values. But with the growth of the mass of the constant (fixed and circulating) capital, which this labor manipulates, the proportion of this produced quantity of values declines as compared to the value of this total capital. And the value of this capital grows with its mass, although not in the same proportion. This proportion, and consequently the rate of profit, falls in spite of the fact that the same mass of living labor is controlled as before, and the same amount of surplus-labor absorbed by the capital. This proportion changes, not because the mass of living labor decreases, but because the mass of the materialised labor set in motion by living labor increases. It is a relative decrease, not an absolute one, and has really nothing to do with the absolute magnitude of the labor and surplus-labor set in motion. The fall of the rate of profit is not due to an absolute, but only to a relative decrease of the variable part of the total capital, that is, its decrease as compared with the constant part.

The same thing which applies to any given mass of labor and surplus-labor, applies also to a growing number of laborers, and thus under the above assumptions, to any growing mass of the controlled labor in general and to its unpaid part, the surplus-labor, in particular. If the laboring population increases from two million to three million, if, furthermore, the variable capital invested in wages also rises to three million from its former amount of two million, while the constant capital rises from four million to fifteen million, then the mass of surplus-labor, and of surplus-value, under the above assumption of a constant working day and a constant rate of surplus-value, rises by 50%, that is, from two million to

three million. Nevertheless, in spite of this growth in the absolute mass of surplus-labor and surplus-value by 50%, the proportion of the variable to the constant capital would fall from 2 : 4 to 3 : 15, and the proportion of the surplus-value to the total capital, expressed in millions, would be

I. $4\,c + 2\,v + 2\,s$; $C = 6$, $p' = 33\frac{1}{3}\%$.

II. $15\,c + 3\,v + 3\,s$; $C = 18$, $p' = 16\frac{2}{3}\%$.

While the mass of surplus-value has increased by one-half, the rate of profit has fallen by one-half. However, the profit is only the surplus-value calculated on the total social capital, so that its absolute magnitude, socially considered, is the same as the absolute magnitude of the surplus-value. In this case, the absolute magnitude of the profit would have grown by 50%, in spite of its enormous relative decrease compared to the advanced total capital, or in spite of the enormous fall of the average rate of profit. We see, then, that in spite of the progressive fall of the rate of profit, there may be an absolute increase of the number of laborers employed by capital, an absolute increase of the labor set in motion by it, an absolute increase of the mass of surplus-labor absorbed, a resulting absolute increase of the produced surplus-value, and consequently an absolute increase in the mass of the produced profit. And this increase may be progressive. And it *may* not only be so. On the basis of capitalist production, it *must* be so, aside from temporary fluctuations.

The capitalist process of production is essentially a process of accumulation. We have shown that the mass of values, which must be simply reproduced and maintained, increases progressively with the development of capitalist production to the extent that the productivity of labor grows, even if the employed labor-power should remain constant. But the development of social productivity carries with it a still greater increase of the produced use-values, of which the means of production form a part. And the additional labor, whose appropriation reconverts this additional value into capital, does not depend on the value, but on the mass of these means of production (including the means of subsistence), because the laborer in the productive process is not operating with the

exchange-value, but with the use-value of the means of production. Accumulation itself, however, and the concentration of capital that goes with it, is a material means of increasing the productive power. Now, this growth of the means of production includes the increase of the laboring population, the creation of a laboring population which corresponds to the surplus-capital or even exceeds its general requirements, leading to an overpopulation of working people. A momentary excess of the surplus-capital over the laboring population controlled by it would have a twofold effect. It would, on the one hand, mitigate the conditions which dominate the offspring of the laboring class and would facilitate marriages among them, by raising wages. This would tend to increase the laboring population. On the other hand, it would employ the methods by which relative surplus-value is created (introduction and improvement of machinery) and thereby create still more rapidly an artificial relative overpopulation, which in its turn would be a hothouse for the actual propagation of its numbers, since under capitalist production poverty propagates its kind. The nature of the capitalist process of accumulation, which process is but an element in the capitalist process of production, implies as a matter of course that the increased mass of means of production, which is to be converted into capital, must always find on hand a corresponding increase, or even an excess, of laboring people for exploitation. The progress of the process of production and accumulation *must*, therefore, be accompanied by a growth of the mass of available and appropriated surplus-labor, and consequently by a growth of the absolute mass of profit appropriated by the social capital. But the same laws of production and accumulation increase the volume and value of the constant capital in a more rapid progression than those of the variable capital invested in living labor. The same laws, thus, produce for the social capital an increase in the absolute mass of profit and a falling rate of profit.

We have one of consideration the fact that the same amount of values represents a progressively increasing mass of use-values and enjoyments to the extent that the capitalist process

of production carries with it a development of the productive power of social labor, a multiplication of the lines of production, and an increase of products.

The development of capitalist production and accumulation lifts the processes of labor to a higher scale and gives them greater dimensions, which imply larger investments of capital for each individual establishment. A growing concentration of capitals (accompanied by a growing number of capitalists, though not to the same extent) is therefore one of the material requirements of capitalist production as well as one of the results produced by it. Hand in hand with it, and mutually interacting, goes a progressive expropriation of the more or less direct producers. It is, then, a matter of course for the capitalists that they should control increasing armies of laborers (no matter how much the variable capital may relatively decrease in comparison to the constant capital), and that the mass of surplus-value, and of profit, appropriated by them, should grow simultaneously with the fall of the rate of profit, and in spite of it. The same causes which concentrate masses of laborers under the control of capitalists, are precisely those which also swell the mass of fixed capital, auxiliary and raw materials in a growing proportion as compared to the mass of the employed living labor.

It requires but a passing notice at this point, that, given a certain laboring population, the mass of surplus-value, and therefore the absolute mass of profit, must grow if the rate of surplus-value increases by a prolongation or intensification of the working day, or by a lowering of the value of wages through a development of the productive power of labor, and must do so in spite of the relative decrease of the variable capital compared to the constant.

The same development of the productive power of social labor, the same laws, which express themselves in a relative fall of the variable as compared to the total capital and in a correspondingly hastened accumulation, while this accumulation in its turn becomes the starting point of a further development of the productive power and of a further relative fall of the variable capital, this same development manifests

itself, aside from temporary fluctuations, by a growing increase of the employed total labor-power, a growing increase of the absolute mass of surplus-value, and consequently of profits.

Now, in what form must this two-faced law with the same causes for a decrease of the *rate* of profits and a simultaneous increase of the absolute mass of profits show itself? A law based on the fact that under certain conditions the appropriated mass of surplus-labor, and consequently of surplus-value, increases, and that, so far as the total capital is concerned, or the individual capital as an aliquot part of the total capital, profit and surplus-value are identical magnitudes?

Take that aliquot part of capital which is the basis of our calculation of the rate of profit, for instance 100. These 100 illustrate the average composition of the total capital, say 80 c + 20 v. We have seen in the second part of this volume, that the average rate of profit is determined, not by the particular composition of individual capital, but by the average composition of social capital. If the variable capital decreases as compared to the constant, or to the total capital, then the rate of profit, or the relative magnitude of surplus-value calculated on the total capital, falls even though the intensity of exploitation were to remain the same, or even to increase. But it is not this relative magnitude alone which falls. The magnitude of the surplus-value or profit absorbed by the total capital of 100 also falls absolutely. At a rate of surplus-value of 100%, a capital of 60 + 40 produces a mass of surplus-value and profit amounting to 40; a capital of 70 c + 30 v a mass of profit of 30; a capital of 80 c + 20 v produces only 20 of profit. This fall refers to the mass of surplus-value, and thus of profit, and is due to the fact that the total capital of 100, with the same intensity of labor exploitation, employs less living labor, sets in motion less labor-power, and therefore produces less surplus-value. Taking any aliquot part of the social capital, that is, of capital of average composition, as a standard by which to measure surplus-value — and this is done in all calculations of profit — a relative fall of surplus-value is identical with its absolute

fall. The rate of profit sinks in the above cases from 40% to 30% and 20%, because the mass of surplus-value, and of profit, produced by the same capital falls absolutely from 40 to 30 and 20. Since the magnitude of the value of capital, by which the surplus-value is measured, is given as 100, a fall in the proportion of surplus-value to this given magnitude can be only another expression for the fact that surplus-value and profit decrease absolutely. This is, of course, a tautology. But we have demonstrated that the nature of the capitalist process of production brings about this decrease.

On the other hand, the same causes which bring about an absolute decrease of surplus-value and profit on a given capital, and consequently in the percentage of the rate of profit, produce an increase of the absolute mass of surplus-value and profit appropriated by the total capital (that is, by the capitalists as a whole). How can this be explained, and what is the only way in which this can be explained, or what are the conditions on which this apparent contradiction is based?

While any aliquot part, any 100 of the social capital, any 100 of average social composition, is a given magnitude, for which a fall in the rate of profit implies a fall in the absolute magnitude of profit, just because the capital which serves as a standard of measurement is a constant magnitude, the magnitude of the social capital, on the other hand, as well as that of the capital in the hands of individual capitalists, is variable, and in keeping with our assumptions it must vary inversely to the decrease of its variable portion.

In our former illustration, when the percentage of composition was 60 c + 40 v, the corresponding surplus-value and profit was 40, and the rate of profit 40%. Take it that the total capital in this stage of composition was one million. In that case the total surplus-value, and total profit, amounted to 400,000. Now, if the composition changes later to 80 c + 20 v, while the degree of labor exploitation remains the same, then the surplus-value and profit for each 100 is 20. But as we have demonstrated that the absolute mass of surplus-value and profit increases in spite of the fall of the rate of profit, in spite of the decrease in the production of surplus-value by

a capital of 100, that it grows, say, from 400,000 to 440,000, there is no other way in which this could be brought about than by a growth of the total capital to 2,200,000 to the extent that this new composition developed. The mass of the total capital set in motion has risen by 220%, while the rate of profit has fallen by 50%. If the total capital had only been doubled, it could have produced no more surplus-value and profit with a rate of profit of 20% than the old capital of 1,000,000 at a rate of 40%. If it had grown to less than twice its old size, it would have produced less surplus-value or profit than the old capital of 1,000,000, which, with its former composition, would have had to grow from 1,000,000 to no more than 1,100,000, in order to raise its surplus-value from 400,000 to 440,000.

We meet here once more the previously analysed law, that the relative decrease of the variable capital, or the development of the productive power of labor, requires an increasing mass of total capital for the purpose of setting in motion the same quantity of labor-power and absorbing the same quantity of surplus-labor. Consequently the possibility of a relative surplus of laboring people develops to the extent that capitalist production advances, not because the productive power of social labor *decreases,* but because it *increases.* Relative overpopulation does not arise out of an absolute disproportion between labor and means of subsistence, or of means for the production of these means of existence, but out of a disproportion due to the capitalist exploitation of labor, a disproportion between the growing increase of capital and its relatively decreasing demand for an increase of population.

A fall in the rate of profit by 50% means its fall by one-half. If the mass of profit is to remain the same, the capital must be doubled. In order that the mass of profit made at a declining rate of profit may remain the same as before, the multiplier indicating the growth of the total capital must be equal to the divisor indicating the fall of the rate of profit. If the rate of profit falls from 40 to 20, the total capital must rise at the rate of 20 to 40, in order that the result may remain the same. If the rate of profit had fallen from 40 to 8,

the capital would have to increase at the rate of 8 to 40, or five times its value. A capital of 1,000,000 at a rate of 40% produces 400,000, and a capital of 5,000,000 at a rate of 8% likewise produces 400,000. This applies, so long as the result is to remain the same. But if the result is to be higher, then the capital must grow at a faster rate than the rate of profit falls. In other words, in order that the variable portion of the total capital may not only remain the same, but may also increase absolutely, although its percentage in the total capital falls, the total capital must grow at a higher rate than the percentage of the variable capital falls. It must grow at such a rate that it requires in its new composition not merely the same old variable capital, but more than it for the purchase of labor-power. If the variable portion of a capital of 100 falls from 40 to 20, the total capital must rise higher than 200, in order to be able to employ a larger variable capital than 40.

Even if the mass of the exploited laboring population were to remain constant, and only the length and intensity of the working day to increase, the mass of the invested capital would have to increase, since it must rise for the mere purpose of employing the same mass of labor under the old conditions of exploitation as soon as the composition of capital varies.

In short, the same development of the social productivity of labor expresses itself in the course of capitalist production on the one hand in a tendency to a progressive fall of the rate of profit, and on the other hand in a progressive increase of the absolute mass of the appropriated surplus-value, or profit; so that on the whole a relative decrease of variable capital and profit is accompanied by an absolute increase of both. This twofold effect, as we have seen, can express itself only in a growth of the total capital at a ratio more rapid than that expressed by the fall in the rate of profit. In order that an absolutely increased variable capital may be employed in a capital of higher composition, that is, a capital in which the constant capital has relatively increased still more than the variable, the total capital must not only grow in proportion

to its higher composition, but even still more rapidly. It follows, then, that an ever larger quantity of capital is required in order to employ the same, and still more an increased amount of labor-power, to the extent that the capitalist mode of production develops. The increasing productivity of labor thus creates necessarily and permanently an apparent overpopulation of laboring people. If the variable capital forms only one-sixth of the total capital instead of one-half, as before, then the total capital must be trebled in order to employ the same amount of labor-power. And if the labor-power to be employed is doubled, then the total capital must be multiplied by six.

Political economy has so far been unable to explain the law of the falling tendency of the rate of profit. So it pointed as a consolation to the increasing mass of profit, the increase in the absolute magnitude of profit for the individual capitalist as well as for the social capital, but even this consolation was based on mere commonplaces and probabilities.

It is simply a tautology to say that the mass of profit is determined by two factors, namely first the rate of profit, and secondly by the mass of capital invested at this rate. It is therefore but a corollary of this tautology to say that there is a possibility for the increase of the mass of profit even though the rate of profit may fall at the same time. This does not help us to get one step farther, since there is also a possibility that the capital may increase without resulting in an increase of the mass of profit, and that it may even increase while the mass of profit is already falling. For 100 at 25% make 25, while 400 at 5% make only 20.[35] But if the same

[35] "We should also expect that, however the rate of the profits of stock might diminish in consequence of the accumulation of capital on the land and the rise of wages, yet the aggregate amount of profits would increase. Thus, supposing that, with repeated accumulations of 100,000 p.st., the rate of profits should fall from 20 to 19, to 18, to 17%, a constantly diminishing rate; we should expect that the whole amount of profits received by those successive owners of capital would be always progressive; that it would be greater when the capital was 200,000 p.st., than when 100,000 p.st.; still greater when 300,000 p.st.; and so on, increasing, though at a diminishing rate, with every increase of capital. This progression, however, is only true for a certain time; thus 19% on 200,000 p.st. is more than 20 on 100,000 p.st.; again 18% on 300,000 p.st. is more than 19% on 200,000 p.st.; but after capital has accumulated to a large amount, and profits have fallen, the further accumulation diminishes the aggregate of profits. Thus, suppose the ac

causes, which bring about a fall in the rate of profit, promote the accumulation, that is, the formation of additional capital, and if each additional capital employs additional labor and produces additional surplus-value; when, on the other hand, the mere fall in the rate of profit implies the fact that the constant capital, and with it the total old capital, have increased, then this process ceases to be mysterious. We shall see later, to what falsifications of calculations some people have recourse in order to deny the possibility of an increase in the mass of profits while the rate of profits is simultaneously decreasing.

We have shown that the same causes, which bring about a tendency of the average rate of profits to fall, necessitate also an accelerated accumulation of capital and consequently an increase in the absolute magnitude, or total mass, of the surplus-labor (surplus-value, profit) appropriated by it. Just as everything is reversed in competition, and thus in the consciousness of its agents, so is also this law, this internal and necessary connection between two apparent contradictions. It is evident, within the proportions indicated above, that a capitalist disposing of a large capital will receive a larger mass of profits than a small capitalist making apparently high profits. A superficial observation of competition shows furthermore that under certain circumstances, when the greater capitalist wishes to make more room for himself on the market by pushing aside the smaller ones, as happens in times of commercial crises, he makes a practical use of this, that is, he lowers his rate of profit intentionally in order to crowd the smaller ones off the field. Particularly merchant's capital, as we shall show at length later on, shows symptoms, which seem to attribute the fall in profits to an expansion of the business,

cumulation should be 1,000,000 p.st., and the profits 7%, the whole amount of profits will be 70,000 p.st.; now if an addition of 100,000 p.st. capital be made to the million, and profits should fall to 6%, 66,000 p.st. or a diminution of 4,000 p.st. will be received by the owners of the stock, although the whole amount of stock will be increased from 1,000,000 p.st. to 1,100,000 p.st."— Ricardo, Political Economy, chapter VII (in Works, McCulloch Edition, 1852, page 68).— The fact is, that the assumption has here been made that the capital increases from 1,000,000 to 1,100,000, that is, by 10%, while the rate of profit falls from 7 to 6%, or 14 2/7%. Hence those tears!

and thus of capital. We shall later on give a scientific expression for this false conception. Similar superficial observations result from the comparison of rates of profit made in some particular lines of business, according to whether they are subject to free competition or to monopoly. The utterly shallow conception existing in the heads of the agents of competition is found in our Roscher, namely the idea that a reduction of the rate of profits is "more prudent and humane." The fall in the rate of profit is in this case attributed to an increase of capital, it appears as a *consequence* of this increase, and of the resultant calculation of the capitalist that the mass of profits to be pocketed by him will be greater at a smaller rate of profits. This entire conception (with the exception of that of Adam Smith, which we shall mention later) rests on the utter misapprehension of what the average rate of profit represents and on the crude idea that prices are indeed determined by adding a more or less arbitrary amount of profit to the actual value of the commodities. Crude as these ideas are, they arise necessarily out of the inverted aspect which the immanent laws of capitalist production represent under competition.

The law that the fall in the rate of profit due to the development of the productive powers is accompanied by an increase in the mass of profit expresses itself furthermore in the fact that a fall in the price of commodities produced by capital is accompanied by a relative increase of the masses of profit contained in them and realised by their sale.

Since the development of the productive powers and the higher composition of capital corresponding to it set in motion an ever increasing quantity of means of production with an ever decreasing quantity of labor, every aliquot part of the total product, every single commodity, or every particular quantity of commodities in the total mass of products absorbs less living labor, and also contains less materialised labor, both as to the wear and tear of fixed capital and to the raw and auxiliary materials consumed. Every single commodity, then, contains a smaller amount of labor materialised in means of production and of labor newly added during production.

Hence the price of the individual commodity falls. The mass of profits contained in the individual commodities may nevertheless increase, if the rate of the absolute or relative surplus-value grows. The commodity then contains less newly added labor, but its unpaid portion grows over its paid portion. However, this is the case only within certain limits. In the course of the development of production, with the enormously growing absolute decrease of the amount of living labor newly embodied in the individual commodities, the mass of unpaid labor contained in them will likewise decrease absolutely, however much it may have grown as compared to their paid portion. The mass of profit on each individual commodity will decrease considerably with the development of the productive power of labor, in spite of the increase of the rate of surplus-value. And this reduction, the same as the fall in the rate of profits, is only delayed by the cheapening of the elements of constant capital and the other circumstances mentioned in the first part of this volume, which increase the rate of profit at a stable, or even falling, rate of surplus-value.

To say that the price of the individual commodities falls, which together make up the total product of the capital, is simply to say that a certain quantity of labor is realised in a larger quantity of commodities, so that each individual commodity contains less labor than before. This is the case even if the price of one of the parts of constant capital, such as raw material, etc., should rise. With the exception of a few cases (for instance, if the productive power of labor cheapens all the elements of constant and variable capital uniformly) the rate of profit will fall in spite of the increased rate of surplus-value, 1), because even a larger unpaid portion of the smaller total amount of newly added labor is smaller than a smaller aliquot portion of unpaid labor was in the former large amount of total labor, and 2), because the higher composition of the capital is expressed through the individual commodity by the fact that that portion of its value, in which newly added labor is materialised, decreases as compared to that portion of its value, which represents raw material, aux-

iliary material, and wear and tear of fixed capital. This change in the proportions of the various component parts of the price of the individual commodities, the decrease of that portion of their price, in which newly added labor is materialised, and the increase of that portion, in which formerly materialised labor is represented, is that form which expresses through the price of the individual commodities the decrease of the variable capital as compared to the constant capital. To the extent that this decrease is absolute for a certain amount of capital, for instance 100, it is also absolute for every individual commodity as an aliquot part of the reproduced capital. However, the rate of profit, if calculated merely on the elements of the price of the individual commodity, would be different from what it actually is. The reason for this is as follows:

[The rate of profit is calculated on the total capital invested, but only for a definite time, in fact, for one year. The rate of profit is the proportion of the surplus-value, or profit, made and realised on the total capital and calculated in percentages. It is, therefore, not necessarily equal to a rate of profit, whose calculation was not based on one year, but on the period of turn-over of the invested capital. These two things do not coincide, unless the capital is turned over exactly in one year.

On the other hand, the profit made in the course of one year is merely the sum of the profits on the commodities produced and sold during the same year. Now, if we calculate the profit on the cost-price of the commodities, we obtain a rate of profit $\frac{p}{k}$, in which p stands for the profit realised during one year, and k for the sum of the cost-prices of the commodities produced and sold during that year. It is evident that this rate of profit $\frac{p}{k}$ will not coincide with the actual rate of profit $\frac{p}{C}$, or mass of profit divided by the total capital, unless $k = C$, that is, unless the capital is turned over in exactly one year.

Let us take three different conditions of some industrial capital.

I.— A capital of 8,000 p.st. produces and sells annually 5,000 pieces of commodities, at 30 sh. per piece, making an annual turn-over of 7,500 p.st. It makes a profit of 10 sh. on each piece, or 2,500 p.st. per year. Every piece, then, contains 20 sh. of capital advance, and 10 sh. of profit, so that the rate of profit per piece is $\frac{10}{20} = 50\%$. The turned-over sum of 7,500 p.st. contains 5,000 p.st. of advanced capital and 2,500 p.st. of profits. Rate of profit for one turn-over, $\frac{p}{k}$, likewise 50%. But the rate of profit calculated on the total capital is the rate of profit $\frac{p}{C} = \frac{2500}{8000} = 31\frac{1}{4}\%$.

II.— Let the capital increase to 10,000 p.st. Owing to an increased productivity of labor, let it be enabled to produce annually 10,000 pieces of commodities at a cost-price of 20 sh. per piece. Let these commodities be sold at a profit of 4 sh., in other words, at 24 sh. per piece. In that case the price of the annual product is 12,000 p.st., of which 10,000 p.st. is advanced capital and 2,000 p.st. profits. The rate of profit $\frac{p}{k}$ is $\frac{4}{20}$ per piece and $\frac{2000}{10,000}$ for the annual turn-over, or in both cases = 20%. And since the total capital is equal to the sum of the cost-prices, namely 10,000 p.st., it follows that $\frac{p}{C}$, the actual rate of profit, is in this case also 20%.

III.— Let the capital increase to 15,000 p.st., owing to a further growth of the productive power of labor, and let it produce annually 30,000 pieces of commodities at a cost-price of 13 sh. per piece, each piece being sold at a profit of 2 sh., or at 15 sh. per piece. The annual turn-over amounts in that case to 30,000 × 15 sh. = 22,500 p.st., of which 19,500 are advanced capital and 3,000 p.st. profits. The rate of profit $\frac{p}{k}$ is then $\frac{2}{13} = \frac{3000}{19,500} = 15\frac{5}{13}\%$. But the actual rate of profit $\frac{p}{C} = \frac{3000}{15,000} = 20\%$.

We see, then, that only in case II, where the turned-over capital-value is equal to the total capital, is the rate of profit per piece, or per total amount turn-over, the same as the rate of profit calculated on the total capital. In case I, where the amount of the turn-over is smaller than the total capital, the rate of profit calculated on the cost-price of the commodities is higher. In case III, where the total capital is smaller

than the amount of the turn-over, the rate of profit calculated on the cost-price of commodities is smaller than the actual rate calculated on the total capital. This is a general rule.

In commercial practice the turn-over is generally calculated inaccurately. It is assumed that the capital has been turned over once, as soon as the sum of the realised commodity-prices equals the sum of the invested total capital. But the *capital* can complete one whole turn-over only in the case that the sum of the *cost-prices* of the realised commodities equals the sum of the total capital.— F. E.]

This demonstrates once more how important it is under the capitalist mode of production that the individual commodities or the commodity-product of a certain period should not be considered as isolated by themselves, as mere commodities, but as products of advanced capital and in their relation to the total capital, which produces them.

Although the *rate* of profit must be calculated by measuring the mass of the produced and realised surplus-value by the consumed portion of capital reappearing in the commodities as well as by the sum of this portion plus that portion of capital which, though not consumed, is employed and continues to serve in production, the *mass* of profit cannot be equal to anything but the mass of profit, or surplus-value, contained in the commodities themselves and to be realised by their sale.

If the productivity of industry increases, the prices of the individual commodities fall. There is less paid and unpaid labor contained in them. Let the same labor produce, say, thrice its former product. Then the individual product requires two-thirds less labor. And since the profit can constitute but a portion of the amount of labor congealed in the individual commodities, the mass of profit in the individual commodities must decrease. And this must hold good, within certain limits, even if the rate of surplus-value should rise. In any case, the mass of profits on the total product does not fall below the original mass of profits so long as the capital employs the same number of laborers at the same degree of exploitation. (This may also take place, if fewer laborers

are employed at a higher rate of exploitation.) For to the same extent that the mass of profit on the individual product decreases does the number of products increase. The mass of profits remains the same, only it is distributed differently over the total amount of commodities. Nor does this alter the division of the amount of value created by newly added labor between the laborers and capitalists. The mass of profit cannot increase, so long as the same amount of labor is employed, unless the unpaid surplus-labor increases, or, supposing the intensity of exploitation to remain the same, unless the number of laborers grows. Or, both of these causes may, of course, combine to produce this result. In all these cases, which, however, according to our assumption, presuppose an increase of the constant capital as compared to the variable and an increase in the magnitude of the total capital, the individual commodity contains a smaller mass of profit and the rate of profit falls even if it is calculated on the individual commodity. A given quantity of additional labor is materialised in a larger quantity of commodities. The price of the individual commodities falls. Abstractly speaking, the rate of profit may remain the same, even though the price of the individual commodity may fall as a result of an increase in the productivity of labor and a simultaneous increase in the number of these cheaper commodities, for instance, if the increase in the productivity of labor extended its effects uniformly and simultaneously to all the elements of the commodities, so that the total price of the commodities would fall in the same proportion in which the productivity of labor would increase, while on the other hand the mutual relations of the different elements of the price of commodities would remain the same. The rate of profit might even rise, if a rise in the rate of surplus-value were accompanied by a considerable reduction in the value of the elements of constant, and particularly of fixed, capital. But in reality, as we have seen, the rate of profit will fall in the long run. In any case, a fall in the price of any individual commodity does not by itself give a clue to the rate of profit. Everything depends on the magnitude of the total capital invested in its production.

For instance, if the price of one yard of fabric falls from 3 sh. to $1\frac{2}{3}$ sh.; if we know that it contained before this reduction in price $1\frac{2}{3}$ sh. worth of constant capital, yarn, etc., $\frac{2}{3}$ sh. wages, and $\frac{1}{3}$ sh. profit, while it contains after this reduction 1 sh. of constant capital, $\frac{1}{3}$ sh. of wages, and $\frac{1}{3}$ sh. of profit, we cannot tell whether the rate of profit has remained the same or not. This depends on the question, whether the advanced total capital has increased, and how much, and how many yards of fabric more it produces in a given time.

This phenomenon arising from the nature of the capitalist mode of production, namely, that an increase in the productivity of labor implies a fall in the price of the individual commodity, or of a certain mass of commodities, an increase in the number of commodities, a reduction of the mass of profit in the individual commodity and of the rate of profit on the aggregate of commodities, an increase of the mass of profit in the total quantity of commodities, this phenomenon shows itself on the surface only in a reduction of the mass of profit in the individual commodities, in a fall of their prices, in an increase of the mass of profits in the augmented number of commodities as a whole, which have been produced by the total capital of society or by that of the individual capitalist. It is then imagined that the capitalist adds less profits to the price of the individual commodities on his own free volition and makes up for it by the returns on a greater number of commodities produced by him. This conception rests upon the idea of profit upon alienation, which in its turn is deduced from the ideas of merchant's capital.

We have seen previously, in parts four and seven of Book I, that the growth in the mass of commodities resulting from the productivity of labor and the consequent cheapening of the commodities as such (unless these commodities become determining elements in the price of labor-power) do not affect the proportion between paid and unpaid labor in the individual commodities, in spite of the fall in price.

Since everything appears inverted under competition, the individual capitalist may imagine: 1) That he is reducing his profit on the individual commodity by cutting its price,

but still making a greater profit on account of the larger quantity of commodities which he is selling; 2) that he is fixing the price of the individual commodities and determining the price of the total product by multiplication, while the original process is really one of division (see Book I, chapter XII) and the multiplication is correct only in a secondary way, being based on that division. The vulgar economist does practically no more than to translate the queer concepts of the capitalists, who are in the thralls of competition, into a more theoretical and generalising language and to attempt a vindication of the correctness of those conceptions.

Practically, a fall in the prices of commodities and a rise in the mass of profits contained in the augmented mass of these cheapened commodities is but another expression for the law of the falling rate of profit with a simultaneous increase in the mass of profits.

The analysis of the extent to which a falling rate of profit may coincide with rising prices does not belong in this chapter any more than that of the point previously discussed in volume I, chapter XII, concerning relative surplus-value. A capitalist working with improved methods of production that have not yet become general sells below the market-price, but above his individual price of production. In this way his rate of profit rises until competition levels it down. During this leveling period the second requisite puts in its appearance, namely the expansion of the invested capital. According to the degree of this expansion the capitalist will be enabled to employ a part of his former laborers under the new conditions, and eventually all of them or more, in other words, he will be enabled to produce the same or a greater mass of profits.

CHAPTER XIV.

COUNTERACTING CAUSES.

If we consider the enormous development of the productive powers of labor, even comparing but the last 30 years with all former periods; if we consider in particular the enormous mass of fixed capital, aside from machinery in the strict meaning of the term, passing into the process of social production as a whole, then the difficulty, which has hitherto troubled the vulgar economists, namely that of finding an explanation for the falling rate of profit, gives way to its opposite, namely to the question; How is it that this fall is not greater and more rapid? There must be some counteracting influences at work, which thwart and annul the effects of this general law, leaving to it merely the character of a tendency. For this reason we have referred to the fall of the average rate of profit as a tendency to fall.

The following are the general counterbalancing causes:

I. *Raising the Intensity of Exploitation.*

The rate at which labor is exploited, the appropriation of surplus-labor and surplus-value, is raised by a prolongation of the working day and an intensification of labor. These two points have been fully discussed in volume I as incidents to the production of absolute and relative surplus-value. There are many ways of intensifying labor, which imply an increase of the constant capital as compared to the variable, and consequently a fall in the rate of profit, for instance setting a laborer to watch a larger number of machines. In such cases — and in the majority of manipulations serving to produce relative surplus-value — the same causes, which bring about an increase in the rate of surplus-value, may also imply a fall in the mass of surplus-value, looking upon the matter from the point of view of the

total quantities of invested capital. But there are other means of intensification, such as increasing the speed of machinery, which, although consuming more raw material, and, so far as the fixed capital is concerned, wearing out the machinery so much faster, nevertheless do not affect the relation of its value to the price of labor set in motion by it. It is particularly the prolongation of the working day, this invention of modern industry, which increases the mass of appropriated surplus-labor without essentially altering the proportion of the employed labor-power to the constant capital set in motion by it, and which tends to reduce this capital relatively, if anything. For the rest, we have already demonstrated — what constitutes the real secret of the tendency of the rate of profit to fall — that the manipulations made for the purpose of producing relative surplus-value amount on the whole to this: That on one side as much as possible of a certain quantity of labor is transformed into surplus-value, and that on the other hand as little labor as possible is employed in proportion to the invested capital, so that the same causes, which permit the raising of the intensity of exploitation, forbid the exploitation of the same quantity of labor by the same capital as before. These are the warring tendencies, which, while aiming at a raise in the rate of surplus-value, have at the same time a tendency to bring about a fall in the mass of surplus-value, and therefore of the rate of surplus-value produced by a certain capital. It is furthermore appropriate to mention at this point the extensive introduction of female and child labor, in so far as the whole family must produce a larger quantity of surplus-value for a certain capital than before, even in case the total amount of their wages should increase, which is by no means general.

Whatever tends to promote the production of relative surplus-value by mere improvements in methods, for instance in agriculture, without altering the magnitude of the invested capital, has the same effect. While the constant capital does not increase relatively to the variable in such cases, taking the variable capital as an index of the amount of labor-power employed, the mass of the product *does* increase in proportion

to the labor-power employed. The same takes place, when the productive power of labor (whether its product passes into the consumption of the laborer or into the elements of constant capital) is freed from obstacles of circulation, of arbitrary or other restrictions which become obstacles in course of time, in short, of fetters of all kinds, without touching directly the proportion between the variable and the constant capital.

It might be asked, whether the causes checking the fall of the rate of profit, but always hastening it in the last analysis, include the temporary raise in surplus-value above the average level, which recur now in this, now in that line of production for the benefit of those individual capitalists, who make use of inventions, etc., before they are generally introduced. This question must be answered in the affirmative.

The mass of surplus-value produced by a capital of a certain magnitude is the product of two factors, namely of the rate of surplus-value multiplied by the number of laborers employed at this rate. Hence it depends on the number of laborers, when the rate of surplus-value is given, and on the rate of surplus-value, when the number of laborers is given. In short, it depends on the composite proportion of the absolute magnitudes of the variable capital and the rate of surplus-value. Now we have seen, that on an average the same causes, which raise the rate of relative surplus-value, lower the mass of the employed labor-power. It is evident, however, that there will be a more or less in this according to the definite proportion, in which the opposite movements exert themselves, and that the tendency to reduce the rate of profit will be particularly checked by a raise in the rate of absolute surplus-value due to a prolongation of the working day.

We saw in the case of the rate of profit, that a fall in the rate was generally accompanied by an increase in the mass of profit, on account of the increasing mass of the total capital employed. From the point of view of the total variable capital of society, the surplus-value produced by it is equal to the profit produced by it. Both the absolute mass and the absolute rate of surplus-value have thus increased. The one

has increased, because the quantity of labor-power employed by society has grown, the other, because the intensity of exploitation of this labor-power has increased. But in the case of a capital of a given magnitude, for instance 100, the rate of surplus-value may increase, while the mass may decrease on an average; for the rate is determined by the proportion, in which the variable capital produces value, while its mass is determined by the proportional part which the variable capital constitutes in the total capital.

The rise in the rate of surplus-value is a factor, which determines also the mass of surplus-value and thereby the rate of profit, for it takes place especially under conditions, in which, as we have seen, the constant capital is either not increased at all relatively to the variable capital, or not increased in proportion. This factor does not suspend the general law. But it causes that law to become more of a tendency, that is, a law whose absolute enforcement is checked, retarded, weakened, by counteracting influences. Since the same causes, which raise the rate of surplus-value (even a prolongation of the working time is a result of large scale industry), also tend to decrease the labor-power employed by a certain capital, it follows that these same causes also tend to reduce the rate of profit and to check the speed of this fall. If one laborer is compelled to perform as much labor as would be rationally performed by two, and if this is done under circumstances, in which this one laborer can replace three, then this one will produce as much surplus-labor as was formerly produced by two, and to that extent the rate of surplus-value will have risen. But this one will not produce as much as formerly three, and to that extent the mass of surplus-value will have decreased. But this reduction in mass will be compensated, or limited, by the rise in the rate of surplus-value. If the entire population is employed at a higher rate of surplus-value, the mass of surplus-value will increase, although the population may remain the same. It will increase still more, if the population increases at the same time. And although this goes hand in hand with a relative reduction of the number of laborers employed in proportion to the magni-

tude of the total capital, yet this reduction is checked or moderated by the rise in the rate of surplus-value.

Before leaving this point, we wish to emphasize once more that, with a capital of a certain magnitude, the *rate* of surplus-value may rise, while its *mass* is decreasing, and vice versa. The mass of surplus-value is equal to the rate multiplied by the number of laborers; however, this rate is never calculated on the total, but only on the variable capital, actually only for a day at a time. On the other hand, with a given magnitude of a certain capital, the *rate of profit* can never fall or rise, without a simultaneous fall or rise in the *mass of surplus-value.*

II. *Depression of Wages Below their Value.*

This is mentioned only empirically at this place, since it, like many other things, which might be enumerated here, has nothing to do with the general analysis of capital, but belongs in a presentation of competition, which is not given in this work. However, it is one of the most important causes checking the tendency of the rate of profit to fall.

III. *Cheapening of the Elements of Constant Capital.*

Everything that has been said in the first part of this volume about the causes, which raise the rate of profit while the rate of surplus-value remains the same, or independently of the rate of surplus-value, belongs here. This applies particularly to the fact that, from the point of view of the total capital, the value of the constant capital does not increase in the same proportion as its material volume. For instance, the quantity of cotton, which a single European spinning operator works up in a modern factory, has grown in a colossal degree compared to the quantity formerly worked up by a European operator with a spinning wheel. But the value of the worked-up cotton has not grown in proportion to its mass. The same holds good of machinery and other fixed capital. In short, the same development, which increases the mass of the constant capital relatively over that of the variable, reduces the value of its elements as a result of the in-

creased productivity of labor. In this way the value of the constant capital although continually increasing, is prevented from increasing at the same rate as its material volume, that is, the material volume of the means of production set in motion by the same amount of labor-power. In exceptional cases the mass of the elements of constant capital may even increase, while its value remains the same or even falls.

The foregoing bears upon the depreciation of existing capital (that is, of its material elements) which comes with the development of industry. This is another one of the causes which by their constant effects tend to check the fall of the rate of profit, although it may under certain circumstances reduce the mass of profit by reducing the mass of capital yielding a profit. This shows once more that the same causes, which bring about a tendency of the rate of profit to fall, also check the realisation of this tendency.

IV. *Relative Overpopulation.*

The production of a relative surplus-population is inseparable from the development of the productivity of labor expressed by a fall in the rate of profit, and the two go hand in hand. The relative overpopulation becomes so much more apparent in a certain country, the more the capitalist mode of production is developed in it. This, again, is on the one hand a reason, which explains why the imperfect subordination of labor to capital continues in many lines of production, and continues longer than seems at first glance compatible with the general stage of development. This is due to the cheapness and mass of the disposable or unemployed wage laborers, and to the greater resistance, which some lines of production, by their nature, oppose to a transformation of manufacture into machine production. On the other hand, new lines of production are opened up, especially for the production of luxuries, and these lines take for their basis this relative overpopulation set free in other lines of production by the increase of their constant capital. These new lines start out with living labor as their predominating element, and go by degrees through the same evolution as the other

lines of production. In either case the variable capital constitutes a considerable proportion of the total capital and wages are below the average, so that both the rate and mass of surplus-value are exceptionally high. Since the average rate of profit is formed by leveling the rates of profit in the individual lines of production, the same cause, which brings about a falling tendency of the rate of profit, also produces a counterbalance to this tendency and paralyses its effects more or less.

V. *Foreign Trade.*

To the extent that foreign trade cheapens partly the elements of constant capital, partly the necessities of life for which the variable capital is exchanged, it tends to raise the rate of profit by raising the rate of surplus-value and lowering the value of the constant capital. It exerts itself generally in this direction by permitting an expansion of the scale of production. But by this means it hastens on one hand the process of accumulation, on the other the reduction of the variable as compared to the constant capital, and thus a fall in the rate of profit. In the same way the expansion of foreign trade, which is the basis of the capitalist mode of production in its stages of infancy, has become its own product in the further progress of capitalist development through its inner necessities, through its need of an ever expanding market. Here we see once more the dual nature of those effects. (Ricardo entirely overlooked this side of foreign trade.)

Another question, which by its special nature is really beyond the scope of our analysis, is the following: Is the average rate of profit raised by the higher rate of profit, which capital invested in foreign, and particularly in colonial trade, realises?

Capitals invested in foreign trade are in a position to yield a higher rate of profit, because, in the first place, they come in competition with commodities produced in other countries with lesser facilities of production, so that an advanced country is enabled to sell its goods above their value even when it sells them cheaper than the competing countries. To the

extent that the labor of the advanced countries is here exploited as a labor of a higher specific weight, the rate of profit rises, because labor which has not been paid as being of a higher quality is sold as such. The same condition may obtain in the relations with a certain country, into which commodities are exported and from which commodities are imported. This country may offer more materialised labor in goods than it receives, and yet it may receive in return commodities cheaper than it could produce them. In the same way a manufacturer, who exploits a new invention before it has become general, undersells his competitors and yet sells his commodities above their individual values, that is to say, he exploits the specifically higher productive power of the labor employed by him as surplus-value. By this means he secures a surplus-profit. On the other hand, capitals invested in colonies, etc., may yield a higher rate of profit for the simple reason that the rate of profit is higher there on account of the backward development, and for the added reason, that slaves, coolies, etc., permit a better exploitation of labor. We see no reason, why these higher rates of profit realised by capitals invested in certain lines and sent home by them should not enter as elements into the average rate of profit and tend to keep it up to that extent.[36] We see so much less reason for the contrary opinion, when it is assumed that such favored lines of investment are subject to the laws of free competition. What Ricardo has in mind as objections, is mainly this: With the higher prices realised in foreign trade, commodities are bought abroad and sent home. These commodities are sold on the home market, and this can constitute at best but a temporary advantage of the favored spheres of production over others. This aspect of the matter is changed, when we no longer look upon it from the point of view of money. The favored country recovers more labor in exchange for less labor, although this difference, this surplus, is pocketed by a certain class, as it is in any exchange between labor

[36] Adam Smith was right in this respect, contrary to Ricardo, who said: "They contend the equality of profits will be brought about by the general rise of profits; and I am of opinion that the profits of the favoured trade will speedily submit to the general level. (Works, MacCulloch ed., p. 73.)

and capital. So far as the rate of profit is higher, because it is generally higher in the colonial country, it may go hand in hand with a low level of prices, if the natural conditions are favorable. It is true that a compensation takes place, but it is not a compensation on the old level, as Ricardo thinks.

However, this same foreign trade develops the capitalist mode of production in the home country. And this implies the relative decrease of the variable as compared to the constant capital, while it produces, on the other hand, an overproduction for the foreign market, so that it has once more the opposite effect in its further course.

And so we have seen in a general way, that the same causes, which produce a falling tendency in the rate of profit, also call forth counter-effects, which check and partly paralyse this fall. This law is not suspended, but its effect is weakened. Otherwise it would not be the fall of the average rate of profit, which would be unintelligible, but rather the relative slowness of this fall. The law therefore shows itself only as a tendency, whose effects become clearly marked only under certain conditions and in the course of long periods.

Before passing on to something new, we will, for the sake of preventing misunderstanding, repeat two statements, which we have substantiated at different times.

1) The same process, which brings about a cheapening of commodities in the course of development of the capitalist mode of production, also causes a change in the organic composition of the social capital invested in the production of commodities, and thereby lowers the rate of profit. We must be careful, then, not to confound the reduction in the relative cost of an individual commodity, including that portion of its cost which represents wear and tear of machinery, with the relative rise in the value of the constant as compared to the variable capital, although vice versa every reduction in the relative cost of the constant capital, whose material elements retain the same volume or increase in volume, tends to raise the rate of profit, in other words, tends to reduce the value of the constant capital to that extent as compared with the shrinking proportions of the employed variable capital.

2) The fact that the additional living labor contained in the individual commodities, which together make up the product of capital, stands in a decreasing proportion to the materials and instruments of labor consumed by them; the fact, that an ever decreasing quantity of additional living labor is materialised in them, because their production requires less labor to the extent that the productive power of society is developed,— this fact does not touch the proportion, according to which the living labor contained in the commodities is divided into paid and unpaid labor. On the other hand, although the total quantity of additional living labor contained in them decreases, the unpaid portion increases over the paid portion, either by an absolute, or by a proportional reduction of the paid portion; for the same mode of production, which reduces the total quantity of the additional living labor in the commodities, is accompanied by a rise of the absolute and relative surplus-value. The falling tendency of the rate of profit is accompanied by a rising tendency of the rate of surplus-value, that is, in the rate of exploitation. Nothing is more absurd, for this reason, than to explain a fall in the rate of profit by a rise in the rate of wages, although there may be exceptional cases where this may apply. Statistics do not become available for actual analyses of the rates of wages in different epochs and countries, until the conditions, which shape the rate of profit, are thoroughly understood. The rate of profit does not fall, because labor becomes less productive, but because it becomes more productive. Both phenomena, the rise in the rate of surplus-value and the fall in the rate of profit, are but specific forms through which the productivity of labor seeks a capitalistic expression,

VI. *The Increase of Stock Capital.*

The foregoing five points may be supplemented by the following, which, however, cannot be more fully detailed for the present. A portion of capital serves only as interest-bearing capital, and is so calculated, to the extent that capitalist production makes progress and hastens accumulation. This term interest-bearing capital is not applied here to capital loaned

by a capitalist who is satisfied with interest on it, while the industrial capitalist borrowing it pockets the investor's profit. This has no bearing upon the level of the average rate of profit, for this rate is concerned only with profit as composed of interest + profit of all sorts + ground rent, and the proportional division into these particular categories is immaterial for it. We speak here of interest-bearing capital in the sense that these capitals, although invested in large productive enterprises, yield only large or small amounts of interest, so-called dividends, after all costs have been paid. This is typical of railroads, for instance. These dividends do not help to level the average rate of profit, because they represent a lower than the average rate of profit. If they did help in this, then the average rate of profit would fall much lower. Theoretically such capitals may be included in the calculation, and in that case the result will be a lower rate of profit than that which actually seems to exist and determine the actions of the capitalists, since the constant capital is the largest as compared to the variable capital precisely in these enterprises.

CHAPTER XV.

UNRAVELING THE INTERNAL CONTRADICTIONS OF THE LAW.

I. *General Remarks.*

We have seen in the first part of this volume, that the rate of profit expresses the rate of surplus-value always lower than it actually is. We have now seen, that even a rising rate of surplus-value has a tendency to express itself in a falling rate of profit. The rate of profit would be equal to the rate of surplus-value only if $c = 0$, that is, if the entire invested capital were paid out in wages. A falling rate of profit does not express a falling rate of surplus-value, unless the proportion of the value of the constant capital to the quantity of labor-power set in motion by it remains unchanged, or the amount of labor-power has increased relatively over the value of the constant capital.

Ricardo, under pretense of analysing the rate of profit, actually analyses only the rate of surplus-value, and he does so on the assumption that the working day is intensively and extensively a constant magnitude.

A fall in the rate of profit and a hastening of accumulation are in so far only different expressions of the same process as both of them indicate the development of the productive power. Accumulation in its turn hastens the fall of the rate of profit, inasmuch as it implies the concentration of labor on a large scale and thereby a higher composition of capital. On the other hand, a fall in the rate of profit hastens the concentration of capital and its centralisation through the expropriation of the smaller capitalists, the expropriation of the last survivers of the direct producers who still have anything to give up. This accelerates on one hand the accumulation, so far as mass is concerned, although the rate of accumulation falls with the rate of profit.

On the other hand, so far as the rate of self-expansion of the total capital, the rate of profit, is the incentive of capitalist production (just as this self-expansion of capital is its only purpose, its fall checks the formation of new independent capitals and thus seems to threaten the development of the process of capitalist production. It promotes overproduction, speculation, crises, surplus-capital along with surplus-population. Those economists who, like Ricardo, regard the capitalist mode of production as absolute, feel nevertheless, that this mode of production creates its own limits, and therefore they attribute this limit, not to production, but to nature (in their theory of rent). But the main point in their horror over the falling rate of profit is the feeling, that capitalist production meets in the development of productive forces a barrier, which has nothing to do with the production of wealth as such; and this peculiar barrier testifies to the finiteness and the historical, merely transitory character of capitalist production. It demonstrates that this is not an absolute mode for the production of wealth, but rather comes in conflict with the further development of wealth at a certain stage.

It is true that Ricardo and his school considered only the

industrial profit, which includes interest. But the rate of ground-rent has likewise a tendency to fall, although its absolute mass increases, and it may also increase proportionately more than the industrial profit. (See Ed. West, who developed the law of ground-rent *before* Ricardo.) If we consider the total social capital C, and use p″ to indicate the industrial profit remaining after the deduction of interest and ground rent, i to indicate interest, and r to indicate ground-rent, then $\frac{s}{C}=\frac{p}{C}=\frac{p''+i+r}{C}=\frac{p''}{C}+\frac{i}{C}+\frac{r}{C}$. We have seen that, while s, the total amount of surplus-value, is continually increasing in the course of capitalist development, nevertheless $\frac{s}{C}$ is just as steadily declining, because C grows still more rapidly than s. Therefore it is no contradiction, that p″, i, and r, should be steadily increasing, each by itself, while $\frac{s}{C}=\frac{p}{C}$ as well as $\frac{p''}{C}$, $\frac{i}{C}$, and $\frac{r}{C}$, each by itself, should ever decline, or that p″ should increase relatively more than i, or r more than p″, or, perhaps, more than p″ and i. With a rise in the total surplus-value or profit s = p, but a simultaneous fall in the rate of profit $\frac{s}{C}=\frac{p}{C}$, the proportional magnitude of the parts p″, i, and r, which make up s = p, may change at will within the limits set by the total amount of s, without thereby affecting the magnitude of s or $\frac{s}{C}$.

The mutual variation of p″, i and r is but a varying distribution of s among different classes. Consequently $\frac{p''}{C}$, $\frac{i}{C}$, and $\frac{r}{C}$, the rate of industrial profit, the rate of interest, and the rate of ground-rent to the total capital, may rise relatively to one another, while $\frac{s}{C}$, the average rate of profit, is falling. The only condition is that the sum of all three cannot exceed $\frac{s}{C}$. If the rate of profit falls from 50% to 25%, because the composition of a certain capital with a rate of surplus-value of 100% has changed from 50 c + 50 v to 75 c + 25 v, then a capital of 1,000 will yield a profit of 500 in the first case, and a capital of 4,000 will yield a profit of 1,000 in the second case. We see that s or p have doubled, while p′ has fallen by one-half. And if that 50% was formerly divided into 20 profit, 10 interest, 20 rent, then $\frac{p''}{C}=$

20%, $\frac{i}{C} = 10\%$, and $\frac{r}{C} = 20\%$. If conditions remained the same after the change from 50% to 25%, then $\frac{p''}{C}$ would be 10%, $\frac{i}{C}$ would be 5%, and $\frac{r}{C} = 10\%$. If, however, $\frac{p'}{C}$ should fall to 3% and $\frac{i}{C}$ to 4%, then $\frac{r}{C}$ would rise to 18%. The proportional magnitude of r would have risen as against p″ and i, but nevertheless p′, the rate of profit, would have remained the same. Under both assumptions, the sum of p″, i, and r would have increased, because it would have been produced by a capital of four times the size of the former. By the way, Ricardo's assumption that the industrial profit (plus interest) originally pockets the entire profit, is historically and logically false. It is rather the progress of capitalist production which, 1), places the whole profit at first hand at the disposal of the industrial and commercial capitalists for further distribution, and, 2), reduces rent to the excess over the profit. On this capitalist basis, rent further increases, so far as it is a portion of profit (that is, of the surplus-value produced by the total capital), while the specific portion of the product, which the capitalist pockets, does not.

The creation of surplus-value, assuming the necessary means of production, or sufficient accumulation of capital, to be existing, finds no other limit but the laboring population, when the rate of surplus-value, that is, the intensity of exploitation, is given; and no other limit but the intensity of exploitation, when the laboring population is given. And the capitalist process of production consists essentially of the production of surplus-value, materialised in the surplus-product, which is that aliquot portion of the produced commodities, in which unpaid labor is materialised. It must never be forgotten, that the production of this surplus-value — and the reconversion of a portion of it into capital, or accumulation, forms an indispensable part of this production of surplus-value — is the immediate purpose and the compelling motive of capitalist production. It will not do to represent capitalist production as something which it is not, that is to say, as a production having for its immediate purpose the consumption of goods, or the production of means of enjoy-

ment for capitalists. This would be overlooking the specific character of capitalist production, which reveals itself in its innermost essence.

The creation of this surplus-value is the object of the direct process of production, and this process has no other limits but those mentioned above. As soon as the available quantity of surplus-value has been materialised in commodities, surplus-value has been produced. But this production of surplus-value is but the first act of the capitalist process of production, it merely terminates the act of direct production. Capital has absorbed so much unpaid labor. With the development of the process, which expresses itself through a falling tendency of the rate of profit, the mass of surplus-value thus produced is swelled to immense dimensions. Now comes the second act of the process. The entire mass of commodities, the total product, which contains a portion which is to reproduce the constant and variable capital as well as a portion representing surplus-value, must be sold. If this is not done, or only partly accomplished, or only at prices which are below the prices of production, the laborer has been none the less exploited, but his exploitation does not realise as much for the capitalist. It may yield no surplus-value at all for him, or only realise a portion of the produced surplus-value, or it may even mean a partial or complete loss of his capital. The conditions of direct exploitation and those of the realisation of surplus-value are not identical. They are separated logically as well as by time and space. The first are only limited by the productive power of society, the last by the proportional relations of the various lines of production and by the consuming power of society. This last-named power is not determined either by the absolute productive power nor by the absolute consuming power, but by the consuming power based on antagonistic conditions of distribution, which reduces the consumption of the great mass of the population to a variable minimum within more or less narrow limits. The consuming power is furthermore restricted by the tendency to accumulate, the greed for an expansion of capital and a production of surplus-value on an enlarged scale. This is a

law of capitalist production imposed by incessant revolutions in the methods of production themselves, the resulting depreciation of existing capital, the general competitive struggle and the necessity of improving the product and expanding the scale of production, for the sake of self-preservation and on penalty of failure. The market must, therefore, be continually extended, so that its interrelations and the conditions regulating them assume more and more the form of a natural law independent of the producers and become ever more uncontrollable. This internal contradiction seeks to balance itself by an expansion of the outlying fields of production. But to the extent that the productive power develops, it finds itself at variance with the narrow basis on which the condition of consumption rest. On this self contradictory basis it is no contradiction at all that there should be an excess of capital simultaneously with an excess of population. For while a combination of these two would indeed increase the mass of the produced surplus-value, it would at the same time intensify the contradiction between the conditions under which this surplus-value is produced and those under which it is realised.

If a certain rate of profit is given, the mass of profit depends on the magnitude of the advanced capital. Accumulation is then determined by that portion of this mass, which is reconverted into capital. This portion, in its turn, being equal to the profit minus the revenue consumed by the capitalists, will depend not merely on the value of this mass, but also on the cheapness of the commodities which the capitalist can buy with it, commodities which pass partly into his individual consumption, partly into his constant capital. (Wages are here assumed to be a given quantity.)

The mass of capital which the laborer sets in motion, whose value he preserves by his labor and reproduces in his product, is quite different from the value which he adds to it. If the mass of the capital equals 1,000, and the added labor 100, then the reproduced capital equals 1,100. If the mass equals 100 and the added labor 20, then the reproduced capital equals 120. In the first case the rate of profit is 10%, in the second 20%. And yet more can be accumulated out of

100 than out of 20. And thus the river of capital rolls on (aside from its depreciation by an increase of the productive power), or its accumulation does, not in proportion to the level of the rate of profit, but in proportion to the impetus which it already has. A high rate of profit, so far as it is based on a high rate of surplus-value, is possible when the working day is very long, although labor may not be highly productive. This is possible, because the wants of the laborers are very insignificant, and therefore the average wages very low, although labor itself unproductive. The low level of wages will have for its counterpart a lack of energy among laborers. Capital then accumulates slowly, in spite of the high rate of profits. Population stagnates and the working time, which the product costs, is long, while the wages paid to the laborer are small.

The rate of profit sinks, not because the laborer is less exploited, but because less labor is employed in proportion to the employed capital in general.

If a falling rate of profit goes hand in hand with an increase in the mass of profits, as we have shown, then a larger portion of the annual product of labor is appropriated by the capitalist under the name of capital (as a substitute for consumed capital) and a relatively smaller portion under the name of profit. Hence the phantastic idea of the priest Chalmers, that the capitalists pocket so much more profits, the smaller the quantity of the annual product expended by them as capital. The state church then comes to their assistance in order to help them to consume the greater part of the surplus product instead of capitalising it. The preacher confounds cause with effect. By the way, the mass of profits increases also at a small rate with the magnitude of the invested capital. However, this requires at the same time a concentration of capital, since the conditions of production then demand the employment of capital on a large scale. It likewise requires its centralisation, that is, a devouring of small capitalists by the great capitalists and decapitalisation of the former. It is but a second instance of separating the producers from their requirements of production, for these small

capitalists still belong to the producers, since their own labor plays a role in this problem. Generally speaking, the labor of a capitalist stands in an inverse proportion to the size of his capital, that is, to his degree as a capitalist. This divorce of requirements of production here, and producers there, is inseparable from the nature of capital. It begins with the inauguration of primitive accumulation. (Vol. I, chap. XXVI), becomes a permanent process in the accumulation and concentration of capital, and expresses itself finally as a centralisation of already existing capitals in a few hands and a decapitalisation of many (a change in the method of expropriation). This process would soon bring about the collapse of capitalist production, if it were not for counteracting tendencies, which continually have a decentralising effect by the side of the centripetal ones.

II. *Conflict between the Expansion of Production and the Creation of Values.*

The development of the productive power of labor shows itself in two ways: First, in the magnitude of the already produced productive powers, in the volume of values and masses of requirements of production, under which new production is carried on, and in the absolute magnitude of the already accumulated productive capital: secondly, in the relative smallness of the capital invested in wages as compared to the total capital, that is, in the relatively small quantity of living labor required for the reproduction and self-expansion of a given capital as compared to mass production. It is at the same time conditioned on the concentration of capital.

So far as the employed labor-power is concerned, the development of the productive powers shows itself once more in two ways: First, in the increase of surplus-labor, that is, the reduction of the necessary labor time required for the reproduction of labor-power; secondly, in the decrease of the quantity of labor-power (the number of laborers) employed in general for the purpose of setting in motion a given capital.

Both movements do not only go hand in hand, but are mutually conditioned on one another. They are different phe-

nomena, through which the same law expresses itself. However, they affect the rate of profit in opposite ways. The total mass of profits is equal to the total mass of surplus-values, the rate of profit $= \frac{s}{C} = \frac{\text{surplus value}}{\text{advanced total capital}}$. Now, surplus-value, as a total, is determined first by its rate, secondly by the mass of labor simultaneously employed at this rate, or what amounts to the same, by the magnitude of the variable capital. One of these factors, the rate of surplus-value, rises in one direction, the other factor, the number of laborers, falls in the opposite direction (relatively or absolutely). To the extent that the development of the productive power reduces the paid portion of the employed labor, it raises the surplus-value by raising its rate; but to the extent that it reduces the total mass of labor employed by a certain capital, it reduces the factor of numbers with which the rate of surplus-value is multiplied in order to calculate its mass. Two laborers, each working 12 hours daily, cannot produce the same mass of surplus-value as 24 laborers each working only 2 hours, even if they could live on air and did not have to work for themselves at all. In this respect, then, the compensation of the reduction in the number of laborers by means of an intensification of exploitation has certain impassible limits. It may, for this reason, check the fall of the rate of profit, but cannot prevent it entirely.

With the development of the capitalist mode of production, the rate of profit therefore falls, while its mass increases with the growing mass of the employed capital. Given the rate, the absolute increase in the mass of capital depends on its existing magnitude. But on the other hand, if this magnitude is given, the proportion of its growth, the rate of its increment, depends on the rate of profit. The increase in the productive power (which, we repeat, always goes hand in hand with a depreciation of the productive capital) cannot directly increase the value of the existing capital, unless it increases, by raising the rate of profit, that portion of the value of the annual product which is reconverted into capital. So far as the productive power is concerned (since it has no direct bearing upon the *value* of the existing capital), it can

accomplish this only by raising the relative surplus-value, or reducing the value of the constant capital, so that those commodities which enter either into the reproduction of labor-power or into the elements of constant capital are cheapened. Both of these things imply a depreciation of the existing capital, and both of them go hand in hand with a relative reduction of the variable as compared to the constant capital. Both things imply a fall in the rate of profit, and both of them check it. Furthermore, so far as an increased rate of profit causes a greater demand for labor, it tends to increase the working population and thus the material, whose exploitation gives to capital its real nature of capital.

Indirectly, however, the development of the productive power of labor contributes to the increase of the value of the existing capital, by increasing the mass and variety of use-values, in which the same exchange value presents itself and which form the material substance, the objective elements, of capital, the material objects of which the constant capital is directly composed and the variable capital at least indirectly. With the same capital and the same labor more things are produced, which may be converted into capital, aside from their exchange value. Things which may serve for the absorption of additional labor, and consequently of additional surplus-labor, and which therefore may become additional capital. The amount of labor, which a certain capital may command, does not depend on its value, but on the mass of raw and auxiliary materials, of machinery and elements of fixed capital, of necessities of life, of which it is composed, whatever may be their value. As the mass of the employed labor, and thus of surplus-labor, increases, so does the value of the reproduced capital and the surplus-value newly added to it grow.

These two elements playing their role in the process of accumulation should not, however, be observed in their quiet existence side by side, as Ricardo does. They imply a contradiction, which expresses itself in antagonistic tendencies and phenomena. These antagonistic agencies oppose each other simultaneously.

Together with the incentives for an actual increase of the laboring population, which originates in the augmentation of that portion of the total social product which serves as capital, there are the effects of other agencies, which create merely a relative over-population.

Together with the fall of the rate of profit grows the mass of capitals, and hand in hand with it goes a depreciation of the existing capitals, which checks this fall and gives an accelerating push to the accumulation of capital-values.

Together with the development of the productive power grows the higher composition of capital, the relative decrease of the variable as compared to the constant capital.

These different influences make themselves felt, now more side by side in space, now more successively in time. Periodically the conflict of antagonistic agencies seeks vent in crises. The crises are always but momentary and forcible solutions of the existing contradictions, violent eruptions, which restore the disturbed equilibrium for a while.

The contradiction, generally speaking, consists in this that the capitalist mode of production has a tendency to develop the productive forces absolutely, regardless of value and of the surplus-value contained in it and regardless of the social conditions under which capitalist production takes place; while it has on the other hand for its aim the preservation of the value of the existing capital and its self-expansion to the highest limit (that is, an ever accelerated growth of this value). Its specific character is directed at the existing value of capital as a means of increasing this value to the utmost. The methods by which it aims to accomplish this comprise a fall of the rate of profit, a depreciation of the existing capital, and a development of the productive forces of labor at the expense of the already created productive forces.

The periodical depreciation of the existing capital, which is one of the immanent means of capitalist production by which the fall in the rate of profit is checked and the accumulation of capital-value through the formation of new capital promoted, disturbs the existing conditions, within which the process of circulation and reproduction of capital take

place, and is therefore accompanied by sudden stagnations and crises in the process of production.

The relative decrease of variable capital as compared to the constant, which goes hand in hand with the development of the productive forces, gives an impulse to the growth of the laboring population, while it continually creates an artificial over-population. The accumulation of capital, so far as its value is concerned, is checked by the falling rate of profit, in order to hasten still more the accumulation of its use-value, and this, in its turn, adds new speed to the accumulation of its value.

Capitalist production is continually engaged in the attempt to overcome these immanent barriers, but it overcomes them only by means which again place the same barriers in its way in a more formidable size.

The real barrier of capitalist production is capital itself. It is the fact that capital and its self-expansion appear as the starting and closing point, as the motive and aim of production; that production is merely production for *capital,* and not vice versa, the means of production mere means for an ever expanding system of the life process for the benefit of the *society* of producers. The barriers, within which the preservation and self-expansion of the value of capital resting on the expropriation and pauperisation of the great mass of producers can alone move, these barriers come continually in collision with the methods of production, which capital must employ for its purposes, and which steer straight toward an unrestricted extension of production, toward production for its own self, toward an unconditional development of the productive forces of society. The means, this unconditional development of the productive forces of society, comes continually into conflict with the limited end, the self-expansion of the existing capital. Thus, while the capitalist mode of production is one of the historical means by which the material forces of production are developed and the world-market required for them created, it is at the same time in continual conflict with this historical task and the conditions of social production corresponding to it.

III. *Surplus of Capital and Surplus of Population.*

With the fall of the rate of profit grows the lowest limit of capital required in the hands of the individual capitalist for the productive employment of labor, required both for the exploitation of labor and for bringing the consumed labor time within the limits of the labor time necessary for the production of the commodities, the limits of the average social labor time required for the production of the commodities. Simultaneously with it grows the concentration, because there comes a certain limit where large capital with a small rate of profit accumulates faster than small capital with a large rate of profit. This increasing concentration in its turn brings about a new fall in the rate of profit at a certain climax. The mass of the small divided capitals is thereby pushed into adventurous channels, speculation, fraudulent credit, fraudulent stocks, crises. The so-called plethora of capital refers always essentially to a plethora of that class of capital which finds no compensation in its mass for the fall in the rate of profit — and this applies always to the newly formed sprouts of capital — or to a plethora of capitals incapable of self-dependent action and placed at the disposal of the managers of large lines of industry in the form of credit. This plethora of capital proceeds from the same causes which call forth a relative over-population. It is therefore a phenomenon supplementing this last one, although they are found at opposite poles, unemployed capital on the one hand, and unemployed laboring population on the other.

An overproduction of capital, not of individual commodities, signifies therefore simply an over-accumulation of capital — although the overproduction of capital always includes the overproduction of commodities. In order to understand what this over-accumulation is (its detailed analysis follows later), it is but necessary to assume it to be absolute. When would an overproduction of capital be absolute? When would it be an overproduction which would not affect merely a few important lines of production, but which would be so absolute as to extend to every field of production?

There would be an absolute overproduction of capital as

soon as the additional capital for purposes of capitalist production would be equal to zero. The purpose of capitalist production is the self-expansion of capital, that is, the appropriation of surplus-labor, the production of surplus-value, of profit. As soon as capital would have grown to such a proportion compared with the laboring population, that neither the absolute labor time nor the relative surplus-labor time could be extended any further (this last named extension would be out of the question even in the mere case that the demand for labor would be very strong, so that there would be a tendency for wages to rise); as soon as a point is reached where the increased capital produces no larger, or even smaller, quantities of surplus-value than it did before its increase, there would be an absolute overproduction of capital. That is to say, the increased capital $C + \Delta C$ would not produce any more profit, or even less profit, than capital C before its expansion by ΔC. In both cases there would be a strong and sudden fall in the average rate of profit, but it would be due to a change in the composition of capital which would not be caused by the development of the productive forces, but by a rise in the money-value of the variable capital (on account of the increased wages) and the corresponding reduction in the proportion of surplus-labor to necessary labor.

In reality the matter would amount to this, that a portion of the capital would lie fallow completely or partially (because it would first have to crowd some of the active capital out before it could take part in the process of self-expansion), while the active portion would produce values at a lower rate of profit, owing to the pressure of the unemployed or but partly employed capital. Matters would not be altered in this respect, if a part of the additional capital were to take the place of some old capital crowding this into the position of additional capital. We should always have on one side the sum of old capitals, on the other that of the additional capitals. The fall in the rate of profit would then be accompanied by an absolute decrease in the mass of profits, since under the conditions assumed by us the mass of the employed labor-power could not be increased and the rate of surplus-

value not raised, so that there could be no raising of the mass of surplus-value. And the reduced mass of profits would have to be calculated on an increased total capital.— But even assuming that the employed capital were to continue producing value at the old rate, the mass of profits remaining the same, this mass would still be calculated on an increased total capital, and this would likewise imply a fall in the rate of profits. If a total capital of 1,000 yielded a profit of 100, and after its increase to 1,500 still yielded 100, then 1,000 in the second case would yield only $66\frac{2}{3}$. The self-expansion of the old capital would have been reduced absolutely. A capital of 1,000 would not yield any more under the new circumstances than formerly a capital of $666\frac{2}{3}$.

It is evident that this actual depreciation of the old capital could not take place without a struggle, that the additional capital ΔC could not assume the functions of capital without an effort. The rate of profit would not fall on account of competition due to the overproduction of capital. The competitive struggle would rather begin, because the fall of the rate of profit and the overproduction of capital are caused by the same conditions. The capitalists who are actively engaged with their old capitals would keep as much of the new additional capitals as would be in their hands in a fallow state, in order to prevent a depreciation of their original capital and a crowding of its space within the field of production. Or they would employ it for the purpose of loading, even at a momentary loss, the necessity of keeping additional capital fallow upon the shoulders of new intruders and other competitors in general.

That portion of ΔC which would be in new hands would seek to make room for itself at the expense of the old capital, and would accomplish this in part by forcing a portion of the old capital into a fallow state. The old capital would have to give up its place to the new and retire to the place of the completely or partially unemployed additional capital.

Under all circumstances, a portion of the old capital would be compelled to lie fallow, to give up its capacity of capital and stop acting and producing value as such. The com-

petitive struggle would decide what part would have to go into this fallow state. So long as everything goes well, competition effects a practical brotherhood of the capitalist class, as we have seen in the case of the average rate of profit, so that each shares in the common loot in proportion to the magnitude of his share of investment. But as soon as it is no longer a question of sharing profits, but of sharing losses, every one tries to reduce his own share to a minimum and load as much as possible upon the shoulders of some other competitor. However, the class must inevitably lose. How much the individual capitalist must bear of the loss, to what extent he must share in it at all, is decided by power and craftiness, and competition then transforms itself into a fight of hostile brothers. The antagonism of the interests of the individual capitalists and those of the capitalist class as a whole then makes itself felt just as previously the identity of these interests impressed itself practically on competition.

How would this conflict be settled and the "healthy" movement of capitalist production resumed under normal conditions? The mode of settlement is already indicated by the mere statement of the conflict whose settlement is under discussion. It implies the necessity of making unproductive, or even partially destroying, some capital, amounting either to the complete value of the additional capital C, or to a part of it. But a graphic presentation of this conflict shows that the loss is not equally distributed over all the individual capitals, but according to the fortunes of the competitive struggle, which assigns the loss in very different proportions and in various shapes by grace of previously captured advantages or positions, so that one capital is rendered unproductive, another destroyed, a third but relatively injured or but momentarily depreciated, etc.

But under all circumstances the equilibrium is restored by making more or less capital unproductive or destroying it. This would affect to some extent the material substance of capital, that is, a part of the means of production, fixed and circulating capital, would not perform any service as capital: a portion of the running establishments would then close down.

Of course, time would corrode and depreciate all means of production (except land), but this particular stagnation would cause a far more serious destruction of means of production. However, the main effect in this case would be to suspend the functions of some means of production and prevent them for a shorter or longer time from serving as means of production.

The principal work of destruction would show its most dire effects in a slaughtering of the *values* of capitals. That portion of the value of capital which exists only in the form of claims on future shares of surplus-value or profit, which consists in fact of creditor's notes on production in its various forms, would be immediately depreciated by the reduction of the receipts on which it is calculated. One portion of the gold and silver money is rendered unproductive, cannot serve as capital. One portion of the commodities on the market can complete its process of circulation and reproduction only by means of an immense contraction of its prices, which means a depreciation of the capital represented by it. In the same way the elements of fixed capital are more or less depreciated. Then there is the added complication that the process of reproduction is based on definite assumptions as to prices, so that a general fall in prices checks and disturbs the process of reproduction. This interference and stagnation paralyses the function of money as a medium of payment, which is conditioned on the development of capital and the resulting price relations. The chain of payments due at certain times is broken in a hundred places, and the disaster is intensified by the collapse of the credit system. Thus violent and acute crises are brought about, sudden and forcible depreciations, an actual stagnation and collapse of the process of reproduction, and finally a real falling off in reproduction.

At the same time still other agencies would have been at work. The stagnation of production would have laid off a part of the laboring class and thereby placed the employed part in a condition, in which they would have to submit to a reduction of wages, even below the average. This operation has the same effect on capital as though the relative or absolute surplus-value had been increased at average wages. The time

of prosperity would have promoted marriages among the laborers and reduced the decimation of the offspring. These circumstances, while implying a real increase in population, do not signify an increase in the actual working population, but they nevertheless affect the relations of the laborers to capital in the same way as though the number of the actually working laborers had increased. On the other hand, the fall in prices and the competitive struggle would have given to every capitalist an impulse to raise the individual value of his total product above its average value by means of new machines, new and improved working methods, new combinations, which means, to increase the productive power of a certain quantity of labor, to lower the proportion of the variable to the constant capital, and thereby to release some laborers, in short, to create an artificial over-population. The depreciation of the elements of constant capital itself would be another factor tending to raise the rate of profit. The mass of the employed constant capital, compared to the variable, would have increased, but the value of this mass might have fallen. The present stagnation of production would have prepared an expansion of production later on, within capitalistic limits.

And in this way the cycle would be run once more. One portion of the capital which had been depreciated by the stagnation of its function would recover its old value. For the rest, the same vicious circle would be described once more under expanded conditions of production, in an expanded market, and with increased productive forces.

However, even under the extreme conditions assumed by us this absolute overproduction of capital would not be an absolute overproduction in the sense that it would be an absolute overproduction of means of production. It would be an overproduction of means of production *only to the extent that they serve as capital,* so that the increased value of its increased mass would also imply a utilisation for the production of more value.

Yet it would be an overproduction, because capital would be unable to exploit labor to a degree required by the "healthy, normal" development of the process of capitalist production,

a degree of exploitation, which would increase at least the mass of profit to the extent that the mass of the employed capital would grow; which would therefore exclude any possibility of the rate of profit falling to the same extent that capital grows, or of the rate of profits falling even more rapidly than capital grows.

Overproduction of capital never signifies anything else but overproduction of means of production — means of production and necessities of life — which may serve as capital, that is, serve for the exploitation of labor at a given degree of exploitation; for a fall in the intensity of exploitation below a certain point calls forth disturbances and stagnations in the process of capitalist production, crises, destruction of capital. It is no contradiction that this overproduction of capital is accompanied by a more or less considerable relative over-population. The same circumstances, which have increased the productive power of labor, augmented the mass of produced commodities, expanded the markets, accelerated the accumulation of capital both as concerns its mass and its value, and lowered the rate of profit, these same circumstances have also created a relative over-population, and continue to create it all the time, an over-population of laborers who are not employed by the surplus-capital on account of the low degree of exploitation at which they might be employed, or at least on account of the low rate of profit, which they would yield with the given rate of exploitation.

If capital is sent to foreign countries, it is not done, because there is absolutely no employment to be had for it at home. It is done, because it can be employed at a higher rate of profit in a foreign country. But such capital is absolute surplus-capital for the employed laboring population and for the home country in general. It exists as such together with the relative over-population, and this is an illustration of the way in which both of them exist side by side and are conditioned on one another.

On the other hand, the fall in the rate of profit connected with accumulation necessarily creates a competitive struggle. The compensation of the fall in the rate of profit by a rise in

the mass of profit applies only to the total social capital and to the great capitalists who are firmly installed. The new additional capital, which enters upon its functions, does not enjoy any such compensating conditions. It must conquer them for itself, and so the fall in the rate of profit calls forth the competitive struggle among capitalists, not vice versa. This competitive struggle is indeed accompanied by a transient rise in wages and a resulting further fall of the rate of profit for a short time. The same thing is seen in the overproduction of commodities, the overstocking of markets. Since the aim of capital is not to minister to certain wants, but to produce profits, and since it accomplishes this purpose by methods which adapt the mass of production to the scale of production, not vice versa, conflict must continually ensue between the limited conditions of consumption on a capitalist basis and a production which forever tends to exceed its immanent barriers. Moreover, capital consists of commodities, and therefore the overproduction of capital implies an overproduction of commodities. Hence we meet with the peculiar phenomenon that the same economists, who deny the overproduction of commodities, admit that of capital. If it is said that there is no general overproduction, but that a disproportion grows up between various lines of production, then this is tantamount to saying that within capitalist production the proportionality of the individual lines of production is brought about through a continual process of disproportionality, that is, the interrelations of production as a whole enforce themselves as a blind law upon the agents of production instead of having brought the productive process under their common control as a law understood by the social mind. It amounts furthermore to demanding that countries, in which capitalist production is not yet developed, should consume and produce at the same rate as that adapted to countries with capitalist production. If it is said that overproduction is only relative, then the statement is correct; but the entire mode of production is only a relative one, whose barriers are not absolute, but have absoluteness only in so far as it is capitalistic. Otherwise, how could there be a lack of demand for the very

commodities which the mass of the people want, and how would it be possible that this demand must be sought in foreign countries, in foreign markets, in order that the laborers at home might receive in payment the average amount of necessities of life? This is possible only because in this specific capitalist interrelation the surplus-product assumes a form, in which its owner cannot offer it for consumption, unless it first reconverts itself into capital for him. Finally, if it is said that the capitalists would only have to exchange and consume those commodities among themselves, then the nature of the capitalist mode of production is forgotten, it is forgotten, that the question is merely one of expanding the value of the capital, not of consuming it. In short, all these objections to the obvious phenomena of overproduction (phenomena which do not pay any attention to these objections) amounts to this, that the barriers of capitalist production are not absolute barriers of production itself and therefore no barriers of this specific, capitalistic, production. But the contradiction of this capitalist mode of production consists precisely in its tendency to an absolute development of productive forces, a development, which comes continually in conflict with the specific conditions of production in which capital moves and alone can move.

It is not a fact that too many necessities of life are produced in proportion to the existing population. The reverse is true. Not enough is produced to satisfy the wants of the great mass decently and humanely.

It is not a fact that too many means of production are produced to employ the able bodied portion of the population. The reverse is the case. In the first place, too large a portion of the population is produced consisting of people who are really not capable of working, who are dependent through force of circumstances on the exploitation of the labor of others, or compelled to perform certain kinds of labor which can be dignified with this name only under a miserable mode of production. In the second place, not enough means of production are produced to permit the employment of the entire able bodied population under the most productive conditions,

so that their absolute labor time would be shortened by the mass and effectiveness of the constant capital employed during working hours.

On the other hand, there is periodically a production of too many means of production and necessities of life to permit of their serving as means for the exploitation of the laborers at a certain rate of profit. Too many commodities are produced to permit of a realisation of the value and surplus-value contained in them under the conditions of distribution and consumption peculiar to capitalist production, that is, too many to permit of the continuation of this process without ever recurring explosions.

It is not a fact that too much wealth is produced. But it is true that there is periodical overproduction of wealth in its capitalistic and self-contradictory form.

The barrier of the capitalist mode of production becomes apparent:

1) In the fact that the development of the productive power of labor creates in the falling rate of profit a law which turns into an antagonism of this mode of production at a certain point and requires for its defeat periodical crises.

2) In the fact that the expansion or contraction of production is determined by the appropriation of unpaid labor, and by the proportion of this unpaid labor to materialised labor in general, or, to speak the language of the capitalists, is determined by profit and by the proportion of this profit to the employed capital, by a definite rate of profit, instead of being determined by the relations of production to social wants to the wants of socially developed human beings. The capitalist mode of production, for this reason, meets with barriers at a certain scale of production which would be inadequate under different conditions. It comes to a standstill at a point determined by the production and realisation of profit, not by the satisfaction of social needs.

If the rate of profit falls, there follows on one hand an exertion of capital, in order that the capitalist may be enabled to depress the individual value of his commodities below the social average level and thereby realise an extra profit at the

prevailing market prices. On the other hand, there follows swindle and a general promotion of swindle by frenzied attempts at new methods of production, new investments of capital, new adventures, for the sake of securing some shred of extra profit, which shall be independent of the general average and above it.

The rate of profit, that is, the relative increment of capital, is above all important for all new offshoots of capital seeking an independent location. And as soon as the formation of capital were to fall into the hands of a few established great capitals, which are compensated by the mass of profits for the loss through a fall in the rate of profits, the vital fire of production would be extinguished. It would fall into a dormant state. The rate of profit is the compelling power of capitalist production, and only such things are produced as yield a profit. Hence the fright of the English economists over the decline of the rate of profit. That the bare possibility of such a thing should worry Ricardo, shews his profound understanding of the conditions of capitalist production. The reproach moved against him, that he has an eye only to the development of the productive forces regardless of "human beings," regardless of the sacrifices in human beings and capital *values* incurred, strikes precisely his strong point. The development of the productive forces of social labor is the historical task and privilege of capital. It is precisely in this way that it unconsciously creates the material requirements of a higher mode of production. What worries Ricardo is the fact that the rate of profit, the stimulating principle of capitalist production, the fundamental premise and driving force of accumulation, should be endangered by the development of production itself. And the quantitative proportion means everything here. There is indeed something deeper than this hidden at this point, which he vaguely feels. It is here demonstrated in a purely economic way, that is, from a bourgeois point of view, within the confines of capitalist understanding, from the standpoint of capitalist production itself, that it has a barrier, that it is relative, that it is not an absolute, but only a historical mode of production

corresponding to a definite and limited epoch in the development of the material conditions of production.

IV. *Supplementary Remarks.*

Seeing that the development of the productive power of labor proceeds very disproportionately in the various lines of industry, not only in degree, but also in at times in opposite directions, it follows that the mass of the average profit (= surplus-value) must be considerably below that level, which one would naturally assume according to the development of the productive forces in the most advanced lines of industry. The fact that the development of the productive forces in different lines of industry proceeds in considerably different rates, or even in opposite directions, is not due merely to the anarchy of competition and the peculiarity of the bourgeois mode of production. The productivity of labor is also conditioned on natural premises, which frequently become less productive to the extent that productivity, so far as it depends on social conditions, increases. This leads to opposite movements in these different spheres, progress here, retrogression there. Consider, for instance, the mere influence of the seasons, on which the greater part of the raw materials depends for its mass, the exhaustion of forests, coal and iron mines, etc.

While the circulating part of constant capital, such as raw material, etc., continually increases in mass to the extent that the productivity of labor grows, it is not so with the fixed capital, such as buildings, machinery, apparatus for lighting, heating, etc. Although a machine becomes absolutely dearer with the growth of its bodily mass, it becomes relatively cheaper. If five laborers produce ten times as many commodities as formerly, this does not increase the outlay for fixed capital tenfold; although the value of this part of the constant capital increases with the development of the productive forces, it does not increase by any means in the same proportion with them. We have frequently pointed out the difference in the proportions of the constant to the variable capital, as it expresses itself in the fall of the rate of profit,

and the difference in the same proportions as expressed with the development of the productivity of labor with reference to the individual commodity and its price.

[The value of a commodity is determined by the total labor-time, whether past or living, incorporated in it. The increase in the productivity of labor consists precisely in this that the share of the living labor is reduced while that of the past labor is increased, but in such a way that the total quantity of labor incorporated in that commodity declines, so that the living labor decreases more than the past labor increases. The past labor — the constant part of capital — materialised in the value of a certain commodity consists partly of wear and tear of fixed, partly of circulating constant capital entirely consumed by that commodity, such as raw and auxiliary materials. That portion of value which comes from raw and auxiliary materials must decrease with the productivity of labor, because this productivity seeks expression through these materials by reducing their value. On the other hand, it is precisely characteristic of the rising productivity of labor, that the fixed part of the constant capital is strongly augmented and with it that portion of value which is transferred by wear and tear to the commodities. In order that a new method of production may turn out to be a real increase in productivity, it must transfer in wear and tear a smaller portion of the value of fixed capital than is deducted from it through a saving of living labor, in short, it must reduce the value of the commodity. It must do so as a matter of course, even if an additional value is transferred to the commodity through an increase in the quantity or value of raw and auxiliary materials, as may sometimes happen. All additions of value must be more than compensated by the reduction in value resulting from a decrease in living labor.

This reduction of the total quantity of labor incorporated in a certain commodity seems to be the essential mark of an increase in the productive power of labor, no matter under what sort of social conditions production is carried on. There is no doubt that the productivity of labor would be measured by this standard in a society, in which the pro-

ducers would regulate their production according to a preconceived plan, or even under a simple production of commodities. But how is this under capitalist production?

Take it, for instance, that a certain line of capitalist industry produces an average normal commodity of its sphere under the following conditions: The wear and tear of fixed capital amounts to $\frac{1}{2}$ shilling per piece; raw and auxiliary materials are transferred into it at the rate of $17\frac{1}{2}$ shillings per piece; in wages, 2 shillings, and surplus-value 2 shillings, the rate of surplus-value being 100%. Total value 22 shillings. We assume for the sake of simplicity that the capital in this line of production has the composition of the average social capital, so that the price of production of the commodities is identical with the value and the profit of the capitalist with the created surplus-value. In that case the cost-price of the commodity is $\frac{1}{2} + 17\frac{1}{2} + 2 = 20$ sh., the average rate of profit $\frac{2}{20} = 10\%$, and the price of production of one individual commodity 22 sh., equal to its value.

Now let us assume that a machine is invented, which reduces the living labor required for each individual commodity by one-half, but at the same time trebles that portion of the commodity's value which is due to the wear and tear of fixed capital. In that case, the calculation is modified in this way: Wear and tear $1\frac{1}{2}$ sh., raw and auxiliary materials the same as before, $17\frac{1}{2}$ sh., wages 1 sh., surplus-value 1 sh., together 21 sh. The commodity has then fallen 1 sh. in value: The new machine has certainly increased the productivity of labor. From the point of view of the capitalist, the matter has now the following aspect: His cost-price is now $1\frac{1}{2}$ sh. for wear, $17\frac{1}{2}$ sh. for raw and auxiliary materials, 1 sh. for wages, total 20 sh., as before. Since the rate of profit is not at once altered by the new machine, he will receive 10% more than his cost-price, that is, 2 sh. The price of production, then, remains unaltered at 22 sh., as before, but it is 1 sh. above the value of these commodities. So far as a society producing under capitalist conditions is concerned, the commodity has not become any cheaper, the new machine signifies no improvement. The capitalist is therefore not interested in the

introduction of this new machine. And since its introduction would make his present and not yet worn-out machinery simply worthless, would make old iron of it, would mean a positive loss for him, he takes good care not to commit such a utopian mistake.

The law of increased productive power, then, does not apply absolutely to capital. So far as capital is concerned, the productive power is not increased by the enhancement of productive labor in general, but only by saving more in the unpaid portion of living labor than is expended in past labor, as we have already indicated in volume I, chapter XV, 2. Here the capitalist mode of production falls into another contradiction. Its historical mission is the ruthless development in geometrical progression, of the productivity of human labor. It becomes disloyal to its mission, whenever it puts a check upon the development of productivity, as it does here. Thus it demonstrates once again that it is becoming weak with age and more and more outliving its usefulness.][37]

Under competition, the increase in the minimum of capital required for the successful operation of an independent industrial establishment in keeping with the increase in productivity assumes the following aspect: As soon as the new and more expensive equipment has become universally established, smaller capitals are henceforth excluded from these enterprises. Smaller capitals can carry on an independent activity in such lines only during the incipient stage of mechanical inventions. On the other hand, very large enterprises, such as railroads, with an extraordinarily high relative proportion of constant capital, do not yield any average rate of profit, but only a portion of it, interest. Otherwise the rate of profit would fall still lower. At the same time, this offers direct employment to large aggregations of capital in the form of stocks.

An increase of capital, or accumulation of capital, does not imply a fall in the rate of profit, unless this growth is accompanied by the aforementioned alterations in the proportions

[37] The foregoing is placed between brackets, because it passes in some points beyond the scope of the original material, which I found in a note of the original manuscript, a revision of which I undertook.

of the organic constituents of capital. Now it so happens that in spite of the continual and daily revolutions in the mode of production, now this, now that, greater or smaller portion of the total capital continues for certain periods to accumulate on the basis of a given average proportion of those constituents, so that its growth does not imply any organic change, and consequently no fall in the rate of profit. This continual expansion of capital, and consequently expansion of production on the basis of the old method of production, which proceeds quietly while the new methods are already developing by its side, is another reason, why the rate of profit does not decrease in the same degree in which the total capital of society grows.

The increase of the absolute number of laborers, in spite of the relative decrease of the variable as compared to the constant capital, does not take place in all lines of production, and not uniformly in those in which it does proceed. In agriculture, the decrease of the element of living labor may be absolute.

By the way, it is but a requirement of the capitalist mode of production that the number of wage workers should increase absolutely, in spite of its relative decrease. Under this mode, labor-powers become superfluous as soon as it is no longer compelled to employ them for 12 to 15 hours per day. A development of the productive forces which would diminish the absolute number of laborers, that is, which would enable the entire nation to accomplish its total production in a shorter time, would cause a revolution, because it would put the majority of the population upon the shelf. In this the specific barrier of capitalist production shows itself once more, proving that capitalist production is not an absolute form for the development of the productive powers and creation of wealth, but rather comes in collision with this development at a certain point. This collision expresses itself partly through periodical crises, which arise from the circumstance that now this, now that, portion of the laboring population is rendered superfluous in its old mode of employment. The barrier of capitalist production is the superfluous time of the laborers. The absolute spare time gained by society does not concern

Capitalism. The development of the productive powers concerns it only to the extent that it increases the surplus labor time of the working class, not to the extent that it decreases the labor time for material production in general. Thus capitalist production moves in contradictions.

We have seen that the growing accumulation of capital implies its growing concentration. Thus the power of capital, the personification of the conditions of social production in the capitalist, grows over the heads of the real producers. Capital shows itself more and more as a social power, whose agent the capitalist is, and which stands no longer in any possible relation to the things which the labor of any single individual can create. Capital becomes a strange, independent, social power, which stands opposed to society as a thing, and as the power of capitalists by means of this thing. The contradiction between capital as a general social power and as a power of private capitalists over the social conditions of production develops into an ever more irreconcilable clash, which implies the dissolution of these relations and the elaboration of the conditions of production into universal, common, social conditions. This elaboration is performed by the development of the productive powers under capitalist production, and by the course which this development pursues.

No capitalist voluntarily introduces a new method of production, no matter how much more productive it may be, and how much it may increase the rate of surplus-value, so long as it reduces the rate of profit. But every new method of production of this sort cheapens the commodities. Hence the capitalist sells them originally above their prices of production, or, perhaps, above their value. He pockets the difference, which exists between these prices of production and the market-prices of the other commodities produced at higher prices of production. He can do this, because the average labor time required socially for the production of these other commodities is higher than the labor time required under the new methods of production. His method of production is above the social average. But competition generalises it and subjects it to the

general law. Then follows a fall in the rate of profit — perhaps first in this sphere of production, which gradually brings the others to its level — which is, therefore, wholly independent of the will of the capitalist.

It must be noted here, that this same law rules also those spheres of production, whose product passes neither directly nor indirectly into the consumption of the laborers or into the conditions under which their necessities are produced; it applies, therefore, also to those spheres of production, in which no cheapening of commodities can increase the relative surplus-value or cheapen labor-power. (It is true that a cheapening of constant capital may increase the rate of profit in all these lines while the exploitation of the laborer remains the same.) As soon as the new mode of production begins to expand, and thereby to furnish the tangible proof that these commodities can actually be produced more cheaply, the capitalists working under the old methods of production must sell their product below their full prices of production, because the value of these commodities has fallen, because the labor time required by these capitalists for the production of these commodities is longer than the social average. In one word — this appears as the effect of competition — these capitalists are compelled to introduce the new method of production, under which the proportion of the variable to the constant capital has been reduced.

All circumstances, which bring about the cheapening of commodities by the employment of improved machinery amount in the last analysis to a reduction of the quantity of labor absorbed by the individual commodities; in the second place, to a reduction of the wear and tear portion of machinery transferred to the value of the individual commodity. To the extent that the wear and tear of machinery is less rapid, it is distributed over more commodities and displaces more living labor during its period of reproduction. In both cases the quantity and value of the fixed constant capital are increased over those of the variable capital.

"All other things being equal, the power of a nation to save from its profits varies with the rate of profits, is great

when they are high, less, when low; but as the rate of profit declines, all other things do not remain equal. . . . A low rate of profit is ordinarily accompanied by a rapid rate of accumulation, relatively to the numbers of the people, as in England . . . a high rate of profit by a slower rate of accumulation, relatively to the numbers of the people." Examples: Poland, Russia, India, etc. (Richard Jones, *An Introductory Lecture on Political Economy,* London, 1833, p. 50ff.) Jones emphasises correctly that in spite of the falling rate of profit the inducements and faculties to accumulate are augmented; first, on account of the growing relative overpopulation; secondly, because the growing productivity of labor is accompanied by an increase in the mass of use-values produced by the same exchange value, that is, an increase in the material elements of capital, thirdly, because the lines of production become more varied; fourthly, because the credit system, stock companies, etc., are developed, and with them the facility of converting money into capital without becoming an industrial capitalist; fifthly, because the wants and the greed for wealth increase; sixthly, because the mass of investments in fixed capital grows; etc.

The following three principal facts of capitalist production must be kept in mind:

1) Concentration of means of production in a few hands, whereby they cease to appear as the property of the immediate laborers and transform themselves into social powers of production. It is true, they first become the private property of capitalists. These are the trustees of bourgeois society, but they pocket the proceeds of their trusteeship.

2) Organisation of labor itself into social labor, by social co-operation, division of labor, and combination of labor with natural sciences.

In both directions, the capitalist mode of production abolishes private property and private labor, even though it does so in contradictory forms.

3) Creation of the world market.

The stupendous productive power developing under the cap-

italist mode of production relatively to population, and the increase, though not in the same proportion, of capital values (not their material substance), which grow much more rapidly than the population, contradict the basis, which, compared to the expanding wealth, is ever narrowing and for which this immense productive power works, and the conditions, under which capital augments its value. This is the cause of crises.

PART IV.

TRANSFORMATION OF COMMODITY-CAPITAL AND MONEY-CAPITAL INTO COMMERCIAL CAPITAL AND FINANCIAL CAPITAL (MERCHANT'S CAPITAL).

CHAPTER XVI.

COMMERCIAL CAPITAL.

Merchant's capital, or trading capital, consists of two subdivisions, namely commercial capital and financial capital, which we shall now proceed to define more in detail, so far as is necessary for the analysis of capital in its innermost structure. This is so much the more needed, as modern political economy, even in its best representatives, indiscriminately mixes trading capital with industrial capital and wholly overlooks the characteristic peculiarities of the former.

The movements of commodity-capital have been analysed in volume II. The total capital of society exists always in part in commodities on the market about to be converted into money, and this part is naturally made up of ever changing elements and is continually changing in quantity. Another part exists as money on the market, ready to be converted into commodities. These portions of the total capital are perpetually passing through these metamorphoses. To the extent that this function of capital in the process of circulation becomes a special function of independent capital and becomes an established service assigned by division of labor to some particular species of capitalists, the commodity-capital becomes commercial or financial capital.

In volume II, chapter VI, under the head of cost of circulation, 2 and 3, we have explained to what extent the transportation industry, the storage and distribution of commodities in a distributable form, may be regarded as processes of production continuing within the process of circulation. These incidents in the circulation of commodity-capital are sometimes confounded with the peculiar functions of commercial or financial capital. It is true that the peculiar functions of these last-named forms of capital are sometimes practically combined with those incidental ones, but with the advancing development of social division of labor the functions of merchant's capital evolve into a distinct type and are separated from those real functions connected with those incidents in circulation. For our present purpose, which is to define the specific difference of this special form of capital, we must leave aside those other functions as irrelevant. So far as capital employed only in the process of circulation, such as commercial capital, combines at times those other functions with its specific ones, it does not appear in its typical form. We do not get its pure type, until we strip it of all incidental functions.

We have seen that the existence of capital in the shape of commodity-capital and the metamorphoses through which it passes within the sphere of circulation in its capacity as commodity-capital on the market — a series of metamorphoses expressed by buying and selling, conversion of commodity-capital into money-capital and money-capital into commodity-capital — form a phase in the process of reproduction of industrial capital, that is, a phase in its process of production as a whole. But we have also seen at the same time that it is distinguished in its function as capital of circulation from its function as productive capital. These are two different and separate forms of existence of the same capital. One portion of the total social capital is continually on the market in the form of capital of circulation, passing through those metamorphoses. For each individual capital, however, its existence as commodity-capital, and its metamorphoses in this form, represent merely ever vanishing and ever renewed points

of transition, stages of transition in the continuity of its process of production. And the elements of commodity-capital on the market vary continually, being perpetually withdrawn from the market and just as perpetually returned to it as new products of the process of production.

Commercial capital is nothing else but a changed form of a portion of this capital of circulation, which exists continually on the market in the process of its metamorphoses within the sphere of circulation. We say explicitly, a portion, because a portion of the selling and buying of commodities takes place between the industrial capitalists themselves. We leave this portion entirely out of consideration in this analysis, because it contributes nothing to the definition of the concept, or to the understanding of the specific nature, of merchant's capital. Moreover, it has been exhaustively treated in volume II.

The dealer in commodities, as a capitalist, appears first on the market as the representative of a certain sum of money, which he advances in his capacity as a capitalist. He desires to transform this sum of money from its original value x into $x + \&x$, that is, the original sum plus his profit. But it is evident that his capital must first enter the market in the shape of money, not only on account of his capacity as a capitalist in general, but also as a trader in commodities in particular. For he does not produce any commodities. He merely trades in them, he acts as middleman in their movements, and in order to be able to trade in them, he must first buy them, must be the owner of money-capital.

Take it that a trader in commodities owns 3,000 p.st., which he invests as a trading capital. He buys with these 3,000 p.st., say, 30,000 yards of linen from some linen manufacturer, at 2 sh. per yard. Then he sells his 30,000 yards. If the annual average rate of profit is 10%, and if he makes a profit of 10% after deducting all incidental expenses, then he has converted his 3,000 p.st. into 3,300 p.st. at the end of one year. How he makes this profit is a question which we shall discuss later. At this place we merely intend to observe the form, which the movements of his capital take. He con-

tinually buys with his 3,000 p.st. linen and sells this linen; he continually repeats this operation of buying for the purpose of selling, M — C — M′, the simple form of capital confined entirely to the sphere of circulation and not interrupted by the intervention of the process of production, which lies outside of its own movement and function.

What, then, is the relation of this commercial capital to the commodity-capital representing a mere passing phase of industrial capital? So far as the linen manufacturer is concerned, he has realised the value of his linen with the money of the merchant. He has thereby completed the first phase in the metamorphosis of commodity-capital, its conversion into money, and he can now, provided that circumstances remain the same, proceed to reconvert this money into yarn, coal, wages, etc., or into means of existence, etc., for the consumption of his revenue. Leaving aside the spending of his revenue, he can continue his process of production.

But while the sale of the linen, its metamorphosis into money, has taken place so far as its direct producer is concerned, it has not yet taken place so far as the linen itself is concerned. It is still on the market as a commodity-capital and awaits the completion of its first metamorphosis, awaits its sale. Nothing has happened to this linen but a change in the person of its owner. From the point of view of its own destination, of its position in the process, it is still a commodity-capital, a saleable commodity; only, it is now in the hands of the merchant instead of those of the manufacturer. The function of selling it, of serving as an agent in the first phase of its metamorphosis, has been transferred from the manufacturer to the merchant, has been converted into the particular business of the merchant, while it used to be a function, which the producer had to perform after completing the process of its production.

Now let us assume that the merchant would not succeed in disposing of those 30,000 yards of linen during the interval, which the linen manufacturer requires for the production of another lot of 30,000 yards and its marketing at 3,000 p.st. In that case, the merchant cannot buy this new lot, because

he still has the old stock of 30,000 yards on hand, which he has not yet reconverted into money-capital. A stagnation then ensues, an interruption of reproduction. Of course, the linen manufacturer might have some additional money-capital in reserve, which he might convert into productive capital independently of the sale of those 30,000 yards of linen, in order to continue his process of production. But this assumption would not alter the matter. So far as the capital tied up in the 30,000 yards of linen is concerned, its process of reproduction is and remains interrupted. Here we see indeed very clearly, that the operations of the merchant are really nothing but operations which must be performed under all circumstances in order to convert the commodity-capital of the producer into money-capital, operations, which promote the functions of the commodity-capital in the process of circulation and reproduction. If a clerk of the producer were to attend exclusively to the sale, and also with the purchase, instead of an independent merchant, this connection would not be obscured for a moment.

Commercial capital, then, is nothing but the commodity-capital of the producer, which has to pass through its transformation into money and to perform its function of commodity-capital on the market. The difference is only that this incidental function of the producer is now established as the exclusive business of a special kind of capitalists, of merchants, and becomes the independent business of a special investment of capital.

This is furthermore shown in the specific form of the circulation of commercial capital. The merchant buys a commodity and then sells it: $M - C - M'$. In the simple circulation of commodities, or even in the circulation of commodities as it appears when a process of circulation of industrial capital, $C' - M - C$, circulation is promoted by the circumstance that every piece of money changes hands twice. The linen manufacturer sells his commodity, the linen, converts it into money; the money of the buyer passes into his hands. With this money he buys yarn, coal, labor, etc., he spends the same money for the purpose of reconverting the value of linen

into those commodities which form the elements of production of linen. The commodity which he buys is not the same kind of commodity which he sells. He has sold products and bought means of production. But it is different with the movements of commercial capital. With his 3,000 p.st., the linen merchant buys 30,000 yards of linen. He sells the same linen for the purpose of recovering his money-capital (increased by profits) from the circulation. It is not the same pieces of money which here change places twice, but the same commodities; the linen passes from the seller into the hands of the buyer, and from the hands of the buyer, who becomes a seller, into those of another buyer. It is sold twice, and it may be sold still oftener, if a series of other merchants intervenes. And it is precisely through this repeated sale, this twofold change of place of the same commodity, that the money advanced by its first buyer for its purchase is recovered, its return flow to him promoted. In the case of C′ — M — C the twofold change of place of the same money assists in the sale of one form of commodities and the purchase of another form. In the other case, M — C — M′, the twofold change of place of the same commodity assists in the recovery of the advanced money from the circulation. This shows that the commodity has not been definitely sold, when it has passed from the hands of the producer into those of the merchant, and that the latter merely continues the operation of selling — or promotes the functions of commodity-capital. But it shows at the same time that the operation C — M, which represents for the productive capitalist a mere function of his capital in its transient form of commodity-capital, constitutes for the merchant the movement M — C — M′, that is, a specific utilisation of his advanced money-capital. A phase in the metamorphosis of commodities here shows itself, with reference to the merchant, in the form of M — C — M′, that is, as the evolution of a separate kind of capital.

The merchant sells his commodity, in this case the linen, definitely to the consumer, whether it be a productive consumer (for instance, a bleacher), or an individual consumer who uses the linen for his private needs. By this means the

merchant recovers his advanced capital (with a profit), and he can then repeat his operation. If the money had served merely as a means of payment, when the merchant bought the linen from the manufacturer, for instance, if the merchant would not have had to make payment until after six weeks, he might be able to pay the manufacturer without even advancing any money-capital of his own. But if he should not have sold the goods at the end of six weeks, he would have to advance his 3,000 p.st. on the date of the expiration, instead of advancing them on delivery of the linen. And if a fall in the market-price should have compelled him to sell below his purchase price, he would have to make good the loss out of his own capital.

Now, what is it that lends to commercial capital the character of an independently operating capital, while in the hands of the producer who does his own selling, it is obviously merely a special form of his capital in some particular phase of his process of reproduction, during its sojourn in the sphere of circulation?

1) It is, in the first place, the fact that the commodity-capital completes its definite conversion into money, its first metamorphosis, its function on the market in its capacity as commodity-capital, in the hands of another agent than the producer, and that this function of commodity-capital is promoted by the operations of the merchant, by his buying and selling, so that these transactions constitute themselves into a separate and independent business distinct from the other functions of industrial capital. Through it a portion of a function, which used to be performed in circulation as a special phase of the process of reproduction, is molded into the exclusive function of an independent agent of the circulation distinct from the producer. But this alone would not be enough to give to this special business the aspect of a function of an independent capital distinct from the industrial capital in process of self-expansion. In fact, it does not assume this aspect in cases where the trade in commodities is carried on by traveling agents, or by other direct agents of the industrial cap-

italist. Another element is necessary to complete its special character.

2) This second element is introduced by the fact that the independent agent of circulation, the merchant, advances money-capital (his own or borrowed) in this position. The transaction which amounts for the industrial capital in process of reproduction merely to C — M, to a conversion of commodity-capital into money-capital, to a mere sale, assumes for the merchant the form M — C — M′, purchase and sale of the same commodity, and thus to a reflux, by means of a sale, of the money-capital expended in a purchase.

It is always C — M, the conversion of commodity-capital into money, which assumes for the merchant the form of M — C — M, whenever he advances money for the purchase of commodities from their producers; it is always the first metamorphosis of commodity-capital, although the same transaction may amount for a producer, or for industrial capital in process of reproduction, to M — C, a reconversion of money into commodities (means of production), the second phase of this metamorphosis. For the linen producer, the first metamorphosis was C — M, the conversion of commodity-capital into money-capital. This transaction amounts for the merchant to M — C, the conversion of his money-capital into commodity-capital. Now, if he sells this linen to a bleacher, it means M — C, conversion of money-capital into productive capital, for the bleacher, which represents the second metamorphosis of his commodity-capital; while it means C — M, the sale of the linen, for the merchant. Actually the commodity-capital manufactured by the producer has now been definitely sold. This transaction, M — C — M, on the part of the merchant represents but the action of a middleman for the transaction C —M between two producers. Or let us assume, that the linen manufacturer buys with a portion of the value of the sold linen some yarn from a yarn dealer. This is M — C for him. For the merchant selling the yarn it is C — M, resale of the yarn. So far as the yarn itself is concerned, in its capacity of commodity-capital, it amounts to

its definite sale, its transition from the sphere of circulation into the sphere of production by means of C — M, the definite conclusion of its first metamorphosis. Whether the merchant buys from the industrial capitalist, or sells to him, the circulation of his merchant's capital, M — C — M, always expresses but the same thing, which constitutes, from the point of view of the commodity-capital itself, a form of transition of the industrial capital in process of reproduction, C — M, the mere completion of its first metamorphosis. The M — C of the merchant's capital amounts only for the industrial capitalist to C — M, but not for the commodity-capital produced by him. It is but the transfer of the commodity-capital from the hands of the industrial capitalist to those of the agent of circulation; Not until the merchant's capital closes the transaction C — M does commodity-capital as such perform its final C — M. M — C — M amounts merely to two times C — M on the part of the same commodity-capital, two successive sales of it, which promote its last and final sale.

It is evident, then, that commodity-capital assumes in commercial capital the form of an independent class of capital through the fact that the merchant advances money-capital. This money-capital serves its purpose as capital only by attending exclusively to the conversion of commodity-capital into money-capital, and it accomplishes this by the continual purchase and sale of commodities. This is its exclusive work. This promotion of the process of circulation of industrial capital is the exclusive function of the money-capital with which the merchant operates. By means of this function he converts his money into money-capital, molds his M into M — C — M′, and by the same process he converts commodity-capital into commercial capital.

So long and so far as commercial capital exists in the form of commodity-capital, from the point of view of the process of reproduction of the total social capital, it is obviously nothing else but that portion of the industrial capital in process of metamorphosis, which is still on the market and serves as commodity-capital. It is therefore only the money-capital advanced by the merchant, which is exclusively destined for

purchase and sale and for this reason never assumes any other form but that of commodity-capital and money-capital, always remaining confined to the sphere of circulation. It is only this money-capital which is now to be analysed with reference to the entire process of reproduction of capital.

As soon as the producer, the linen manufacturer has sold his 30,000 yards of linen to the merchant for 3,000 p.st., he buys with the money so obtained the necessary means of production, and his capital re-enters the process of production; his process of production continues without interruption. So far as he is concerned, the conversion of his commodity into money has been accomplished. But we have already seen that the linen itself has not yet closed its metamorphosis. It has not yet been definitely reconverted into money, it has not yet passed as a use-value into productive or individual consumption. The linen merchant now represents on the market the same commodity-capital, which the linen manufacturer represented originally. So far as the manufacturer is concerned, the process of transformation has been abbreviated, but only to be continued through the hand of the merchant.

If the linen producer had to wait, until his linen had really ceased being a commodity, until it had actually passed into the hands of its final purchaser for productive or individual consumption, his process of reproduction would be interrupted. Or, if he did not wish to interrupt it, he would have had to restrict his operations, to transform a smaller portion of the value of his linen into yarn, coal, labor, etc., in short, into the elements of productive capital, and to hold back a larger portion of it as a money-reserve. While one portion of his capital would then be on the market in the shape of commodities, another would be enabled to continue in the process of production. In this way, one portion would return in the shape of money, while another would be going to market in the form of commodities. This division of capital of the individual producer is not abolished by the intervention of the merchant. But without it that portion of the capital of circulation which is held as a money reserve would have to be always greater in proportion than the portion em-

ployed as productive capital, and the scale of production would have to be restricted accordingly. Instead of that, the producer is now enabled to employ a larger portion of his capital continually in the process of production itself, and a smaller portion as a money reserve.

This is offset on the other hand by the fact that another portion of the social capital, in the shape of merchant's capital, is held continually within the sphere of circulation. It is employed for no other purpose but that of buying and selling. There seems then to have been no other change but that of the persons who hold this capital in their hands.

If the merchant, instead of buying 3,000 p.st.'s worth of linen with the intention of selling it again, were to employ these 3,000 p.st. productively himself, then the productive capital of society would be increased. It is true, that the linen producer would then have to hold back a larger portion of his capital as a money reserve, and likewise the merchant who has now been transformed into an industrial capitalist. On the other hand, if the merchant were to remain a merchant the producer would save time in selling which he could employ for the supervision of the process of production, while the merchant would have to devote his whole time to selling.

If the merchant's capital does not exceed its necessary proportions, it may be assumed

1) that as a result of division of labor, the capital devoted exclusively to buying and selling (and this includes not only the money required for the purchase of commodities, but also the money which must be invested in the labor required for running the business of the merchant, in the constant capital of the merchant, store rooms, transportation, etc.) is smaller than it would be, if the industrial capitalist had to carry on the entire commercial part of his business himself;

2) that the exclusive occupation of the merchant with this business enables the producer to convert his commodities more rapidly into money, and permits the commodity-capital itself to pass more quickly through its metamorphosis, than it would in the hands of the producer;

3) that looking upon the entire merchant's capital in pro-

portion to the industrial capital, one turn-over of the merchant's capital may represent not only the turn-overs of many capitals in one sphere of production, but the turn-overs of a number of capitals in different spheres of production. The first is the case when the linen merchant, after buying with his 3,000 p.st. the product of some linen producer, sells it before the same producer can bring another lot of the same quantity to market, so that the linen merchant has to buy the product of another, or several other, linen manufacturers. When he sells this, he promotes the turn-overs of different capitals in the same sphere of production. The second is the case, if the merchant, after selling his linen, buys, for instance, some silk. In this way he promotes the turn-overs of capitals in different spheres.

In general it may be noted that the turn-over of the industrial capital is not limited merely by the time of circulation, but also by the time of production. The turn-over of merchant's capital, so far as it deals in one sort of commodities, is limited, not merely by the turn-over of one industrial capital, but by the turn-overs of all industrial capitals in the same line of production. After the merchant has bought and sold the linen of one producer, he can buy and sell that of another, before the first can bring another lot of his product on the market. The same merchant's capital may, therefore, promote successively the different turn-overs of the industrial capitals invested in a certain line of production. Its turn-over is therefore not identified with the turn-overs of one sole industrial capital, but with the turn-overs of many, and it does not take the place of but one money reserve, which one single industrial capitalist would have to hold back. The turn-over of the merchant's capital in one sphere of production is naturally determined by the total production of that sphere. But it is not determined by the limits of production or the time of turn-over of any single capital of the same sphere, so far as its time of turn-over is determined by its time of production. For instance, let us assume that A supplies a commodity, which requires three months for its production. After the merchant has bought and sold it, say, in one month,

he can buy and sell the same product of some other producer. Or, after he has sold, say, the corn of some farmer, he can buy with the same money that of another and another, etc. The turn-over of his capital is limited by the mass of corn, which he can buy successively in a certain time, for instance, in one year, while the capital of the farmer is limited in its turn-over, aside from the time of circulation, by the time of production, which lasts one year.

However, the turn-over of the same merchant's capital may promote equally well the turn-overs of capitals in different lines of production.

To the extent that the same merchant's capital serves in different turn-overs to transform different commodity-capitals successively into money, buying and selling them one after another, it performs in its capacity as money-capital the same function with regard to the commodity-capital, which money in general performs by means of its turn-overs within a certain period with regard to commodities.

The turn-over of merchant's capital is not identical with the turn-over or with one single reproduction of one industrial capital of the same size; it is rather equal to the sum of the turn-overs of a number of such capitals, either in the same, or in different spheres of production. The quicker merchant's capital is turned over, the smaller is that portion of the total money-capital, which serves as merchant's capital; the slower it is turned over, the larger is that same portion. The more undeveloped production is, the larger is the sum of merchant's capital as compared to the sum of the commodities thrown into circulation; but so much smaller is it absolutely, or compared with more developed conditions. Vice versa, the opposite holds good. In such undeveloped conditions the greater part of the strict money-capital is in the hands of the merchants, whose wealth constitutes the money wealth as compared to the wealth of others.

The velocity of the circulation of the money-capital advanced by the merchant depends: 1) on the velocity with which the process of production is renewed and the different

processes of production are linked together; 2) on the velocity of consumption.

It is not necessary that merchant's capital should pass merely through the above mentioned turn-over, by first buying commodities to its full amount and then selling them. The merchant may make both movements at the same time. His capital is then divided into two parts. One of them consists of commodity-capital, the other of money-capital. Here he buys and converts his money into commodities. There he sells and converts another part of his commodity-capital into money. On one side, his capital returns in the shape of money-capital, on the other it returns in the shape of commodity-capital. The larger the portion assuming one shape, the smaller the portion assuming another. This alternates and balances itself. If money is not employed merely as a medium of circulation, but also as a means of payment and in conjunction with the credit system, which develops along with it, then the money portion of the merchant's capital is reduced still more in proportion to the volume of the transactions promoted by the merchant's capital. If I buy 1,000 p.st.'s worth of wine on three months' credit, and sell all the wine for cash before the expiration of the three months, then I do not need to advance one penny for these transactions. In this case it is quite obvious that the money-capital, which here serves as merchant's capital, is nothing but industrial capital itself in the shape of money-capital, in process of reflux to itself in the shape of money. (The fact that the producer who sold 1,000 p.st.'s worth of wine on three months' credit may discount his note, which is a certificate of indebtedness of the buyer, at some bank does not alter the matter and has nothing to do with the capital of the merchant.) If market-prices should fall in the mean time by $\frac{1}{10}$, the merchant would not only make no profit, but would recover only 2,700 p.st. instead of 3,000 p.st. He would then have to put up 300 p.st. out of his own pocket. These 300 p.st. serve merely as a reserve for balancing the difference in price. But the same applies to the producer. If he had sold at falling prices, he

would likewise have lost 300 p.st., and could not begin production on the same scale without reserve capital.

The linen merchant buys 3,000 p.st.'s worth of linen from the manufacturer. The manufacturer uses 2,000 p.st. of the 3,000 to buy yarn. He buys this yarn from a yarn dealer. The money with which the manufacturer pays the yarn dealer does not belong to the linen dealer. For the latter has received commodities to this amount. It is the money-form of the manufacturer's own capital. In the hands of the yarn dealer these 2,000 p.st. now appear as returned money-capital. But to what extent are they so, in what respect do they differ from the 2,000 p.st. representing the discarded money-form of the linen and the assumed money-form of the yarn? If the yarn dealer bought on credit and sold for cash before the expiration of his time, then these 2,000 p.st. do not contain one penny of merchant's capital as distinguished from the money-form, which the industrial capital itself assumes in the course of its circulation. The commercial capital then, so far as it is not a mere form of industrial capital, held in the hands of the merchant in the shape of commodity-capital or money-capital, is nothing but that portion of the money-capital which belongs to the merchant himself and is circulated by the purchase and sale of commodities. This portion represents on a reduced scale that part of the capital advanced for production, which must always be in the hands of the industrial as a money reserve, medium of purchase, and which would always have to circulate as money-capital. This portion, in a reduced scale, is now in the hands of capitalist merchants, and performs its functions only in the process of circulation. It is that portion of the total capital which, aside from expenditures of revenue, must continually circulate on the market as a medium of purchase in order to maintain the continuity of the process of reproduction. This portion is so much smaller in comparison to the total capital, the more rapidly the process of reproduction takes place, and the more developed the function of money as a means of payment, that is, of the credit-system.[38]

[38] In order to be able to classify merchant's capital as a productive capital,

Merchant's capital is simply capital performing its functions in the sphere of circulation. The process of circulation is a phase of the total process of reproduction. But no value is produced in the process of circulation, and, therefore, no surplus-value. Nothing takes place there but changes of form of the same mass of values. In fact, nothing occurs there but the metamorphosis of commodities, and this has nothing to do either with the creation or with the transformation of values. If surplus-value is realised by the sale of the produced commodities, it is only because that surplus-value already existed in them. In the second act, the reconversion of money-capital into commodities (elements of production), the buyer does not realise any surplus-value. He merely inaugurates the production of surplus-value by the exchange of his money for means of production and labor-power. So far as these metamorphoses cost time of circulation — a time, during which capital is not producing at all, least of all surplus-value — they limit the creation of values, and the surplus-value will express itself through the rate of profit precisely in an inverse ratio to the duration of the time of circulation. Merchant's capital, therefore, does not create any value or surplus-value,

Ramsay confounds it with the transportation industry and calls commerce "the transport of commodities from one place to another." (*An Essay on the Distribution of Wealth*, p. 19.) The same mistake was committed by Verri in his *Meditazionisull' Economia Politica*, § 4, and by Say in his *Traite d'Economie Politique*, I, 14, 15. In his *Elements of Political Economy*, J. P. Newman says: "In the existing economical arrangements of society, the very act which is performed by the merchant of standing between the producer and the consumer, advancing to the former capital and receiving products in return, and handing over these products to the latter, receiving back capital in return, is a transaction which both facilitates the economical process of the community, and adds value to the products in relation to which it is performed (P. 174)." The producer and the consumer thus save time and money through the intervention of the merchant. This service requires an advance of capital and labor, and must be rewarded, "since it adds value to the products, for the same products, in the hands of the consumers, are worth more than in the hands of the producers." And so commerce appears to him, as it does to Mr. Say, as "strictly an act of production" (P. 175). This view of Newman is fundamentally wrong. The *use*-value of a commodity is greater in the hands of the consumer than in those of the producer, because it is realised by the consumer. For the use-value of a commodity does not serve its end until this commodity enters the sphere of consumption. So long as it is in the hands of the producer, it exists only potentially. But one does not pay twice for a commodity, one does not pay first for its exchange value, and then an extra price for its use-value. By paying for its exchange-value, I appropriate its use-value. And its exchange value is not in the least increased by transferring it from the hand of the producer or middleman to that of the consumer.

at least not directly. If it contributes toward shortening the time of circulation, it may help indirectly to increase the surplus-value produced by the industrial capitalists. To the extent that it helps to expand the market and promotes the division of labor between capitals, thereby enabling capital to work on a larger scale, its function enhances the productivity of the industrial capital and the accumulation of this capital. Inasmuch as it may shorten the time of circulation, it raises the ratio of surplus-value to the advanced capital, that is, the rate of profit. And to the extent that it confines a smaller portion of capital in the form of money-capital to the sphere of circulation, it increases that portion of capital which is engaged directly in production.

CHAPTER XVII.

COMMERCIAL PROFIT.

We have seen in volume II, that the mere functions of capital in the sphere of circulation — the operations which the industrial capitalist must perform, first, in order to realise the value of his commodities, and secondly, in order to reconvert this value into elements of production, operations which promote the metamorphosis of the commodity-capital C′ — M — C, the acts of selling and buying — produce neither value nor surplus-value. It was rather seen that the time required for this purpose, objectively so far as the commodities, subjectively so far as the capitalist is concerned, creates barriers to the production of value and surplus-value. What is true of the metamorphosis of commodity-capital in general, is, as a matter of course, not in the least altered by the fact that a part of it may assume the shape of commercial capital, or that the operations, by which the metamorphosis of commodity-capital is promoted, may become the particular business of a special class of capitalists, or the exclusive function of a portion of the money-capital. If selling and buying of com-

modities — and that is what the metamorphosis of the commodity-capital C′ — M — C amounts to — by the industrial capitalists themselves do not create any value or surplus-value, they will certainly not become creators of value by being transferred from the industrial capitalists to other persons. Furthermore, if that portion of the total social capital, which must be continually on hand in order that the process of reproduction, instead of being interrupted, may proceed continuously — if this money-capital does not create any value or surplus-value, then it cannot acquire the faculty to do so by being continually thrown into circulation for the performance of its function by some other section of the capitalists than the industrial capitalists. We have already indicated to what extent merchant's capital may be indirectly productive, and we shall discuss this point more at length later on.

Commercial capital, then — stripped of all heterogeneous functions, such as storing, expressing, transporting, distributing, arranging, which may be connected with its true function of buying in order to sell — creates neither value nor surplus-value, but promotes only their realisation and thereby the actual exchange of commodities, their transfer from one hand to the other, the social circulation of matter. Nevertheless, since the circulating phase of industrial capital is as much a phase of the process of reproduction as production is, the capital performing its functions independently in the process of circulation must yield the average annual profit just as well as the capital performing its functions in the different lines of production. If merchant's capital were to yield a higher percentage of average profit than industrial capital, then a portion of the industrial capital would transform itself into merchant's capital. If this capital were to yield a lower average profit, then the opposite process would take place. A portion of the merchant's capital would transform itself into industrial capital. No species of capital enjoys a greater facility to change its occupation than merchant's capital.

Seeing that merchant's capital itself does not produce any surplus-value, it is evident that surplus-value appropriated by

it in the shape of average profit must be a portion of the surplus-value produced by the total productive capital. But the question is now: How does the merchant's capital manage to appropriate its share of the surplus-value or profit produced by the productive capital?

It is only outward semblance that commercial profit is a mere addition to, a nominal raise of the prices of commodities above their value.

It is evident that the merchant can draw his profit only out of the price of the commodities sold by him, more even, that this profit, which he makes by the sale of his commodities, must be equal to the difference between his purchase price and his selling price, equal to the excess of the latter over the former.

It is possible, that additional costs (costs of circulation) may enter into the commodities after their purchase and before their sale, and it is also possible, that this may not happen. If such costs should be added, it is evident that the excess of the selling price over the purchase price does not represent merely profit. In order to simplify the analysis, we assume first, that no such costs are added.

For the industrial capitalist, the difference between the selling price and the purchase price of his commodities is equal to the difference between their price of production and their cost-price, or, looking upon the matter from the point of view of the total social capital, equal to the difference between the value of the commodities and their cost-price for the capitalists, and this again resolves itself into the difference between the total quantity of labor incorporated in them and the quantity of the paid labor incorporated in them. Before the commodities bought by the industrial capitalist are taken back to market as saleable commodities, they pass through the process of production, in which that portion of their price which shall be realised as profit must be created. But it is different with the trading merchant. The commodities are in his hands only so long as they are in the process of circulation. He merely continues their sale, the realisation of their price begun by the productive capitalist, and therefore he does not

cause them to pass through any intermediate process, in which they can once more absorb new surplus-value. While the industrial capitalist merely realises the previously produced surplus-value or profit by means of the circulation, the merchant must not only realise his profit in and by the circulation, but he must first make it there. This seems possible in no other way than that of selling the commodities bought by him from the industrial capitalist at their prices of production, or, from the point of view of the total commodity-capital, their values, above their prices of production, by making a nominal addition to these prices, in other words by selling the total commodity-capital above its value and pocketing this excess of their nominal value over their real value. In short, it seems that he would be selling them for more than they are worth.

This method of raising prices seems easy to grasp. For instance, one yard of linen costs 2 sh. If I want to make 10% profit on my sales, I must add $\frac{1}{10}$ to the price, I must sell one yard of linen at 2 sh. $2\frac{2}{5}$d. The difference between its actual price of production and its selling price is then $2\frac{2}{5}$d. and this represents a profit of 10% on 2 sh. This amounts to my selling one yard of linen to the buyer at a price which is in reality the price of $1\frac{1}{10}$ yard. Or, what amounts to the same, it is as though I sold to the buyer only $\frac{10}{11}$ of one yard for 2 sh. and kept $\frac{1}{11}$ for myself. In fact, I might buy back $\frac{1}{11}$ of one yard for $2\frac{2}{5}$ d., if the price of one yard is 2 sh. $2\frac{2}{5}$d. This would be but a round-about way of sharing in the surplus-value and surplus-product by a nominal raise in the price of commodities.

This is the realisation of commercial profit by raising the price of commodities, as it appears at first glance on the surface. And it is indeed a fact that this whole conception of the rise of profit from a nominal raise in the price of commodities, or from their sale above their value, has its origin in the point of view of commercial capital.

But on closer inspection it is quickly seen that this is a mere semblance, and that, assuming capitalist production to be the prevailing mode, commercial profit cannot be realised in this manner. (It is here always a question of averages, not of ex-

ceptions.) Why do we assume that the dealer in commodities can realise his profit of 10% on his commodities only by selling them 10% above their price of production? Because we had assumed that the producer of these commodities, the industrial capitalist (who impersonates *The producer* before the outside world as the personification of industrial capital), had sold them to the dealer at their prices of production. If the prices paid by the dealer for commodities are equal to their prices of production, so that the price of production, or in the last instance the value, represents the cost-price for the merchant, then the excess of the latter's selling price over his purchase price — and only this difference constitutes his profit — must indeed be an excess of their commercial price over their price of production, so that in the last analysis the merchant would be selling all commodities above their values. But why did we assume that the industrial capitalist sells his commodities to the merchant at their prices of production? Or rather, what was the premise of that assumption? It was that the commercial capital did not share in the formation of the average rate of profit (and as yet we are dealing with merchant's capital only in so far as it is commercial capital.) We started necessarily from this premise in the discussion of the average rate of profit, first, because the commercial capital as such did not exist for us at that time; and secondly, because the average profit, and thus the average rate of profit, had to be first developed out of a mutual leveling of profits, or surplus-values, actually produced by the industrial capitals of the different spheres of production. But in the case of merchant's capital we are dealing with a capital which shares in the profit without participating in its production. Hence it now becomes necessary, to supplement our former presentation at this point.

Let us suppose that the total industrial capital advanced for one year is $720\,c + 180\,v = 900$ (say million p.st.), and that $s' = 100\%$. The product is then valued at $720\,c + 180\,v + 180\,s$. Now let us call this product, the produced commodity-capital, C. Its value, or its price of production (both are identical for the total social commodity-capital), is

then 1080, and the rate of profit for the total social capital of 900 is 20%. These 20% constitute, according to our previous analyses, the average rate of profit, since the surplus-value is not calculated in this instance on this or that capital of some particular composition, but on the average composition of the total industrial capital. In short, C = 1,080, and the rate of profit = 20%. Now let us further assume that aside from these 900 of industrial capital, there are invested 100 of merchant's capital, which share in the profit, just as the industrial capital does, in proportion to their magnitude. According to our assumption, the total capital consists of 900 industrial + 100 commercial = 1,000, so that the commercial capital is $\frac{1}{10}$ of the whole. Therefore it participates to the extent of $\frac{1}{10}$ in the total surplus-value of 180, and by this means secures a profit at the rate of 18%. Actually, then, the profit remaining to be distributed among the other $\frac{9}{10}$ of the total capital is only 162, which amounts likewise to 18% on the total capital of 900. In other words, the price at which C is sold by the owners of the industrial capital of 900 to the dealers is 720 c + 180 v + 162 s = 1,062. Now, if the dealer adds his average profit of 18% on his capital of 100, he sells the commodities at 1,062 + 18 = 1,080, which is their price of production, or, from the point of view of the total commodity-capital, their value, although he makes his profit only in and by the circulation, and only by an excess of his selling price over his purchase price. But nevertheless he does not sell the commodities above their value, nor above their price of production, just because he had bought them from the industrial capitalist below their value, or below their price of production.

The merchant's capital, then, plays a determining role in the formation of the average rate of profit in proportion to its pro rata magnitude in the total capital. Hence if we say in the cited case that the average rate of profit is 18%, it would be 20%, were it not for the fact that $\frac{1}{10}$ of the total capital is merchant's capital, which implies a reduction of the rate of profit by $\frac{1}{10}$.

This requires also a more precise and detailed definition of

the price of production. By price of production we mean, now as before, that price of the commodities, which is equal to their cost (the value of the constant + variable capital contained in them) + the average profit. But this average profit is now differently determined. It is determined by the total profit produced by the total productive capital, but it is not calculated merely on this total productive capital. It is not calculated, as first assumed, so that, if the total productive capital were 900, and the profit 180, the average rate of profit would be $\frac{180}{900} = 20\%$. It is rather calculated on the total productive + the merchant's capital, so that, if the total capital is 900 productive + 100 merchant's capital, the average rate of profit is $\frac{180}{1000} = 18\%$. The price of production is, therefore, equal to k (the costs) + 18, instead of k + 20. In the average rate of profit, the share of the total profit falling to the merchant's capital is included. The actual value, or price of production, of the total commodity-capital is, therefore, k + p + m (where m indicates profits in merchant's capital). The price of production, or the price at which the industrial capitalist as such sells his commodities, is thus smaller than the actual price of production of commodities. Or, looking upon the matter from the point of view of the total commodity-capital, the prices at which the class of industrial capitalists sell are lower than the values of commodities. Thus, in the above case, 900 costs + 18% on 900, or 900 + 162 = 1,062.

It follows, then, that the merchant, when selling a commodity at 118 for which he paid 100 does indeed raise the price by 18%. But since this commodity, for which he paid 100, is really worth 118, he does not sell it above its value. We shall retain the price of production as more closely defined above. Then it is evident, that the profit of the industrial capitalist is equal to the excess of the price of production of his commodities over their cost-price, and that the commercial profit, as distinguished from this industrial profit, is equal to the excess of the selling price over the price of production of the commodities, which is their cost-price for the merchant; but that the actual price of the commodities is equal to their

price of production plus the commercial profit. Just as the industrial capital realises only such profits as exist previously in the commodities as surplus-value, so the merchant's capital realises profits only because the entire surplus-value, or profit, has not yet been realised in the price charged for the commodities by the industrial capitalist.[39] The selling price of the merchant, then, stands above his purchase price, not because the former stands above the total value, but because the purchase price stands below this value.

The merchant's capital participates in the compensation of the surplus-value to an average profit, although it does not take part in its production. So the average rate of profit implies that general deduction from surplus-value which falls to the share of merchant's capital, a deduction from the profit of the industrial capital.

From the foregoing it follows:

1) The larger the merchant's capital in proportion to the industrial capital, the smaller is the rate of industrial profit, and vice versa.

2) It was seen in the first part, that the rate of profit is always lower than the rate of the actual surplus-value, that it always expresses the intensity of exploitation too low. In the above case, 720 c + 180 v + 180 s means a rate of surplus-value of 100%, and a rate of profit of only 20%. And if the merchant's capital is included in the calculation, then the difference between the rate of surplus-value and the rate of profit becomes still greater, the latter being only 18% in the present case. In that case, the average rate of profit of the direct exploiter of labor expresses the rate of profit in lower figures than it actually represents.

Assuming all other circumstances to remain the same, the relative volume of the merchant's capital (excepting the small dealer, who represents a hermaphrodite form) will be in a reverse ratio to the velocity of its turn-over, or in a reverse ratio to the energy of the process of reproduction in general. In the process of scientific analysis, the formation of an average rate of profit appears to take its departure from the in-

[39] John Bellers.

dustrial capitals and their competition, and only later on does it seem to be corrected, supplemented, and modified by the intervention of merchant's capital. But in the course of historical events, the process is reversed. It is the commercial capital, which first determines the prices of commodities more or less by their values, and it is the sphere of circulation, while promoting the process of reproduction, which first affords an opportunity for the formation of an average rate of profit. The commercial profit originally determines the industrial profit. Not until the capitalist mode of production has asserted itself and the producer himself has become a merchant, is the commercial profit reduced to that aliquot part of the total surplus-value, which falls to the share of the merchant's capital as an aliquot part of the total capital engaged in the social process of reproduction.

In the analysis of the supplementary compensation of profit through the intervention of the merchant's capital it was found that no additional element for the advanced money-capital entered into the value of commodities, and that the addition to the price, by which the merchant makes his profit, was merely equal to that portion of the value of commodities, which the productive capital did not calculate, but rather left out of calculation in the price of production. The case of this money-capital is similar to that of the fixed capital of the industrial capitalist, which is not all consumed and does not pass as an element into the value of commodities. By the purchase price which the merchant pays for the commodity-capital, he replaces its price of production, M, in money. His own selling price, as we have previously shown, is equal to $M + \Delta M$, and this ΔM stands for the addition to the price of commodities determined by the average rate of profit. By selling these commodities, he recovers together with this ΔM his original money-capital, which he advanced for their purchase. Here, then, we see once more that his money-capital is nothing else but the commodity-capital of the industrial capitalist transformed into money-capital, and this change does not affect the magnitude of the volume of this commodity-capital any more than a direct sale to the ultimate consumer

instead of the merchant would. It merely anticipates payment by the consumer. However, this is correct only on the condition, which we had hitherto assumed, that the merchant has no expenses, or that he need not advance any fixed or circulating capital during the process of metamorphosis of the commodities, of buying and selling, aside from the money-capital which he must advance for the purchase of the commodities from the producer. But this is not so in reality, as we have seen in the analysis of the costs of circulation, volume II, chapter VI. These costs of circulation represent either expenses, which the merchant has to reclaim from the other agents of the circulation, or expenses, which are due directly to his specific business.

No matter what may be the character of these costs of circulation — whether they arise from the purely mercantile nature of the business, or whether they belong to the specific costs of circulation of the merchant, or whether they represent items, which are charges for subsequent processes of production added within the process of circulation, such as expressage, transportation, storage, etc.— they always require that the merchant should have, aside from his advanced money-capital, some additional capital for the purchase and payment of such means of circulation. To the extent that this element of cost consists of circulating capital, it passes wholly as an additional element into the selling price of the commodities; to the extent that it consists of fixed capital, it is transferred in proportion to its wear and tear. It is, however, an element, which forms a nominal value, even if it does not add any real value to the commodities. Such nominal values, which do not add any real value to the commodities, are the purely mercantile costs of circulation. But whether fixed or circulating, the entire additional capital participates in the formation of the general rate of profit.

The purely commercial costs of circulation (that is, excepting the costs of transportation, shipping, storage, etc.) resolve themselves into the costs required for the purpose of realising the value of commodities, by transforming it either from commodities into money, or from money into commodities, by

means of exchange. We leave entirely out of consideration any processes of production, which may eventually continue during the process of circulation, and which may exist separately from the merchant's business. In fact, the actual transport industry and shipping may be, and are, lines of occupation entirely separated from the merchant's business, and the purchaseable or saleable commodities may be stored in warehouses or other public sheds, and the cost of storage, so far as it has to be advanced by the merchant, may be charged up to him by other people. All this becomes apparent in commerce on a large scale, in which the merchant's capital assumes its purest form, unalloyed by other functions. The express owner, the railroad director, the ship owner, are not "merchants." The costs which we consider here are those of buying and selling. We have already remarked in another place that these resolve themselves into accounting, bookkeeping, marketing, correspondence, etc. The constant capital required for this purpose consists of offices, paper, postage, etc. The other costs resolve themselves into variable capital advanced for the employment of mercantile wage workers. (Expressage, cost of transportation, advances for duties, etc., may be considered as being advances made by the merchant for the purchase of commodities and entering into the purchase price to be paid by him.)

All these costs are not incurred in the production of the use-value of the commodities, but in the realisation of their exchange value. They are pure costs of circulation. They do not enter into the strict process of production, but since they enter into the process of circulation they are part of the total process of reproduction.

The only portion of these costs that interests us here is that advanced as variable capital. (Furthermore the following questions remain to be analysed: 1) How is the law, that only socially necessary labor enters into the value of commodities, enforced in the process of circulation? 2) How does accumulation represent itself in the case of merchant's capital? 3) How does merchant's capital function in the actual process of reproduction of society as a whole?)

These costs are due to the economic form of the product, that of a commodity.

Seeing that the labor time lost by the industrial capitalists themselves while directly selling commodities to one another, in other words, the circulation time of the commodities, does not add any value to these commodities, it is evident that this labor time is not endowed with any other character by transferring it from the industrial capitalist to the merchant. The conversion of commodities (products) into money, and of money into commodities (means of production) is a necessary function of industrial capital and, therefore, a necessary operation for the capitalist, who is but personified capital endowed with his consciousness and will. But these functions do not create any value, nor do they produce any surplus-value. The merchant, by performing these operations, by further promoting the functions of capital in the sphere of circulation after the productive capitalist has ceased to do so, merely steps into the shoes of the industrial capitalist. The labor time required for these operations is devoted to certain necessary operations in the process of reproduction of capital, but it adds no value to it. If the merchant did not perform these operations (did not expend the labor time required for them), he would not be using his capital as a circulation agent of industrial capital; he would not be continuing the interrupted function of the industrial capitalist, and consequently he could not participate as a capitalist, in proportion to his advanced capital, in the mass of profit produced by the class of industrial capitalists. In order to share in the mass of surplus-value, in order to expand the value of his advanced capital, the commercial capitalist need not employ any wage workers. If his business is small, he may be the only worker in it. But his wages are derived from that portion of the social profit which falls to his share through the difference between the purchase price paid by him for commodities and their actual price of production.

Under these circumstances, and assuming the merchant's advanced capital to be small, the profit realised by him may not be a bit larger, or may even be smaller, than the wages of

one of the better paid skilled wage workers. In fact, there are employed, side by side with him, many commercial agents of the industrial capitalist, such as buyers, sellers, travelers, who receive the same or a higher income than he, either in the form of wages, or in the form of a check upon the profit (percentages, tantièmes) made by each sale. In the first case, the merchant pockets the mercantile profit as an independent capitalist; in the other case, the salesman, the wage laborer of the industrial capitalist, receives a portion of the profit, either in the form of wages, or in the form of a proportional share in the profit of the industrial capitalist, whose direct agent he is, while his principal pockets both the industrial and the commercial profit. But in all these cases the income of the circulation agent is derived from the merchant's profit, even though he may regard it merely as wages paid to him for the performance of his labor, or, where it does not appear in this light, though his profit may not be any larger than the wages of a better paid wage laborer. This follows from the fact that his labor is not labor producing any values.

The prolongation of the act of circulation implies for the industrial capitalist 1) a personal loss of time, to the extent that it prevents him from performing his own function as a manager of the productive process; 2) a prolonged stay of his product, in the form of money or commodities, in the process of circulation, that is, a process, in which it does not produce any value and by which the direct process of production is interrupted. If this process is not to be interrupted, production must either be restricted, or more money-capital must be advanced, in order that the process of production may proceed on the same scale. This means every time that either a smaller profit is made by the capital hitherto invested, or that additional money-capital must be advanced in order to make the same profit. All this remains unchanged, when the merchant takes the place of the industrial capitalist. Instead of the industrial capitalist, the merchant then spends this prolonged time in the process of circulation; instead of the industrial capitalist, the merchant advances additional capital for the circulation; or, what amounts to the same, instead of a

large portion of the industrial capital straying off continually into the process of circulation, the capital of the merchant is wholly tied up in it; and instead of the industrial capitalist making a smaller profit, he must yield a portion of his profit wholly to the merchant. So long as merchant's capital remains within the boundaries, in which it is necessary, the only difference is that this division of the functions of capital reduces the time exclusively needed for the process of circulation, that less additional capital is advanced for this purpose, and that the loss of the total profits represented by the profits of merchant's capital is smaller than it would have been otherwise. If in the above example, a capital of 720 c + 180 v + 180 s, assisted by a merchant's capital of 100, leaves a profit of 162, or 18% for the industrial capitalist, or, in other words, implies a deduction of 18, then the additional capital required without the assistance of this independent merchant's capital would probably be 200, and the total advance to be made by the industrial capitalist would be 1,100 instead of 900, which, with a surplus-value of 180, would mean a rate of profit of only $16\frac{4}{11}\%$.

Now, if the industrial capitalist, who acts as his own merchant, advances not only the additional capital with which he buys new commodities, before his product in process of circulation has been reconverted into money, but also capital (office expenses and wages for commercial laborers) for the realisation of the value of his commodity-capital, or, in other words, for the process of circulation, then these costs form additional capital, but they produce no surplus-value. They must be made good out of the value of the commodities. For a portion of the value of these commodities must once more be converted into these circulation costs; and no additional surplus-value is created thereby. So far as this concerns the total capital of society, it means that a portion of it must be set aside for secondary operations, which are no part of the process of creating value, and that this portion of the social capital must be continually reproduced for this purpose. This reduces the rate of profit for the individual capitalist and for the entire class of industrial capitalists, a result, which follows from every

addition of auxiliary capital, whenever such capital is required for the purpose of setting in motion the same mass of variable capital.

To the extent that these additional costs connected with the business of circulating are transferred from the shoulders of the industrial to those of the commercial capitalist, the same reduction in the rate of profit takes place, only to a smaller extent and in another way. The matter now assumes the form that the merchant advances more capital than would be necessary, if these costs did not exist, and that the profit on this additional capital increases the amount of the commercial profit, so that the merchant's capital shares with the industrial capital to a greater extent in the leveling of the average rate of profit, thereby lowering the average profit. If in our above example 50 additional capital are advanced for those costs together with a merchant's capital of 100, then the total surplus-value of 180 is distributed over a productive capital of 900 plus a merchant's capital of 150, a total of 1,050. The average rate of profit then falls to $17\frac{1}{7}\%$. The industrial capitalists sells his commodities to the merchant at $900 + 154\frac{2}{7} = 1{,}054\frac{2}{7}$, and the merchant sells them at 1,130, namely 1080 + 50 for costs which he must recover. For the rest it must be assumed that the division between merchant's and industrial capital is accompanied by a centralisation of the expenses of commerce and, consequently, by their reduction.

The question is now: How is it with the commercial wage workers employed by the commercial capitalist, in this case by the merchant?

In one respect, such a commercial laborer is a wage laborer like others. For, in the first place, his labor-power is bought with the variable capital of the merchant, not with the money spent by him as revenue, and consequently this labor-power is not bought for private service, but for the creation of value by means of the capital advanced for it. In the second place, the value of this labor-power, and thus his wages, are determined in the same way as those of other wage workers, namely by the cost of production and reproduction of his specific labor-power, not by the product of his labor.

However, we must make the same distinction between the commercial wage worker and the wage workers directly employed by the industrial capital which we found existing between the industrial capital and merchant's capital, and thus between the industrial capitalist and the commercial capitalist. Since the merchant, as a mere agent of circulation, produces neither value nor surplus-value (for the additional value, which he adds to the commodities by his expenses, resolves itself into an addition of previously existing values, although the question here poses itself: How does he preserve the value of his constant capital?) it follows that the mercantile laborers employed in these same functions cannot very well create any direct surplus-value for him. Here, as in the case of the productive laborers, we assume that wages are determined by the value of labor-power, and that the merchant does not make money by depressing wages, so that he does not allow in his accounts for any advance of wages which he paid only in part, in other words, that he does not make money by cheating his clerks.

The difficulty in the case of the mercantile wage workers is by no means that of explaining the way in which they produce any direct profits for their employer, even though they do not create any direct surplus-value (of which profit is but a changed form.) This part of the question has already been solved by the general analysis of commercial profits. Just as the industrial capital makes profits by selling labor embodied and realised in commodities for which it has not paid any equivalent, so the merchants' capital makes profits by not paying the productive capital for all the unpaid labor incorporated in the commodities (that is, commodities in so far as the capital invested in their production functions as an aliquot part of the total industrial capital), while in selling it demands payment for this unpaid portion still contained in the commodities and not paid for by itself. The relation of the merchant's capital to the surplus-value is different from that of the industrial capital. The industrial capital produces surplus-value by the direct appropriation of the unpaid labor of others. The merchant's capital, on the other hand, appropriates a portion of

this surplus-value by having this portion transferred from the industrial capital to itself.

It is only by its function of realising values that the merchant's capital serves in the process of reproduction as capital and in this capacity gets a share of the surplus-value produced by the total capital. The mass of profits depends for the individual merchant on the mass of capital, which he can invest in this process, and he can use so much more of it in buying and selling, the more unpaid labor his clerks perform. The function itself, by virtue of which the money of the merchant capitalist is capital, is largely performed by his employes. The unpaid labor of his clerks, while it does not create any surplus-value, at least appropriates surplus-value for him, which amounts to the same thing so far as results on his capital go. This unpaid labor is for him, therefore, a source of profit. Otherwise the mercantile business could never be carried on capitalistically, on a large scale.

Just as the unpaid labor of the laborer of the productive capital creates surplus-value for it in a direct way, so the unpaid labor of the commercial wage workers secures a share of this surplus-value for the merchant's capital.

Here is the difficulty: Seeing that the labor time and the labor of the merchant himself do not create any value, but only secure for him a share of already produced surplus-value, how is it with the variable capital, which he invests in the purchase of commercial labor-power? Must this variable capital be included in the expense account of advanced merchant's capital? If not, then it seems to be in contradiction with the law of the compensation of the average rate of profit; for where is there a capitalist who would advance 150, if he could place only 100 in account? If yes, it seems to be in contradiction with the nature of merchant's capital, since this class of capital does not act in the capacity of capital by setting in motion the labor of others, as the industrial capital does, but rather by performing its own work, that is, the process of buying and selling, and only for this and by this means does it transfer a portion of the surplus-value produced by the industrial capital to itself.

(Therefore the following points must be analysed: the variable capital of the merchant; the law of necessary labor in circulation; the way in which the merchant's labor preserves the value of his constant capital; the role of merchant's capital in the total process of reproduction; and finally, the twofold materialisation in commodity-capital and money-capital on one side, and in commercial capital and financial capital on the other.)

If every merchant had only as much money as he is personally able to turn over by his own labor, there would be an infinite dissociation of merchant's capital. This dissociation would increase to the extent that productive capital, in the forward march of the capitalist mode of production, would produce and operate on a larger scale. The disproportion between the two classes of capital would increase. In proportion as capital in the sphere of production would be centralised, it would be decentralised in the sphere of circulation. The purely commercial business of the industrial capitalist, and thus his purely commercial expenses, would be infinitely expanded thereby, for he would have dealings with 1,000 capitalists at a time instead of 100. In this way, a large part of the advantage of the independent organisation of merchant's capital would be lost. Not only the purely commercial expenses, but also the other costs of circulation, sorting, expressage, etc., would grow. This applies to the industrial capital. Now let us consider the merchant's capital. In the first place, let us look at the purely commercial labors. It does not require more time to figure with large than with small numbers. But it costs ten times as much time to make 10 purchases at 100 p.st. each as it does to make one purchase at 1,000 p.st. It costs ten times as much correspondence, paper, postage, to carry on a correspondence with 10 small merchants as it does with one large merchant. A limited division of labor in a commercial office, in which one keeps books, another has charge of the treasury, a third carries on the correspondence, one man buys, another sells, another travels, etc., saves immense quantities of labor time, so that the number of workers employed in wholesale commerce stand in no

proportion to the comparative size of the business. This is so, because in commerce much more than in industry the same function, whether performed on a large or a small scale, costs the same labor time. For this reason, concentration appears historically in the merchant's business before it shows itself in the industrial workshop. There are furthermore the expenses for constant capital. 100 small offices cost incomparably more than one large office, 100 small warehouses more than one large one, etc. The costs of transportation, which enter into the accounts of commercial business at least as advances, grow with this dissociation.

The industrial capitalist would have to spend more for labor and circulation in the commercial part of his business. The same merchant's capital, when distributed among many small capitalists would require more laborers for the performance of its functions, on account of this dissociation, and, besides, more merchant's capital would be needed in order to turn over the same commodity-capital.

Let us designate the entire merchant's capital directly invested in the purchase and sale of commodities by B, and the corresponding variable capital invested in wages of commercial help by b. Then B + b is smaller than it would be, if every merchant had to worry along without any assistance and without investing any capital in b. However, we have not yet overcome all difficulties.

The selling price of the commodities must suffice, 1) to pay the average profit on B + b. This explains itself by virtue of the fact that B + b represents a reduction of the original B and a smaller merchant's capital than would be required without b. But this selling price must also suffice, 2) to cover not only the additional profit on b, but to recover also the paid wages, the variable capital of the merchant. There is the difficulty. Does b form a new constituent of the price, or is it merely a part of the profit made by means of B + b, which takes on the appearance of wages only so far as the mercantile wage worker is concerned, and simply replaces the variable capital from the point of view of the merchant? In this last case, the profit made by the merchant

on his advanced capital B + b would be only equal to the profit due to B according to the general rate, plus b, which he pays out in the form of wages without getting a profit on it.

The crux of the matter is, indeed, to find the limits (mathematically speaking) of b. Let us first define the difficulty exactly. Let us designate the capital invested directly in buying and seling commodities by B, the constant capital (expenses of objective materials of commerce) consumed in this function by K, and the variable capital invested by the merchant by b.

The recovery of B offers no difficulties. It simply represents for the merchant the realised purchase price, the price of production for the manufacturer. The merchant pays this price and in reselling he recovers B as a part of his selling price. Apart from this B, he also receives a profit on B, as we have previously explained. For instance, let the commodities cost 100 p.st. The profit on this may be 10%. In that case the commodities are sold at 110. These commodities cost previously 100, and the merchant's capital of 100 merely makes an additional 10 out of them.

Now let us look at K. It will at most be as large as, but in fact smaller, than that portion of the constant capital, which the producer would have to invest in the department of buying and selling, and which would be an addition to the constant capital invested by him in direct production. However, this portion must be continually recovered by the price of the commodities, or, what amounts to the same, a corresponding portion of the commodities must be continually expended in this form, must, from the point of view of the total capital of society, be continually reproduced in this form. This portion of the advanced constant capital would reduce the rate of profit just as well as the entire mass of it invested in production itself. To the extent that the industrial capitalist gives up the commercial part of his business to the merchant, he is no longer compelled to advance this part of the capital. The merchant advances it in his stead. In a way he does this but nominally, since a merchant neither produces nor reproduces the constant capital consumed by him (the cost of

the objective materials of commerce). Its production appears as a specific business, or at least as a part of the business, of some industrial capitalists, who play a similar role as those, who supply the constant capital for the producers of necessities of life. The merchant recovers this constant capital and his profit on it. Both things reduce the profit of the industrial capitalist to that extent. But owing to the economies and concentration which come with a division of labor, he loses less profits than he would, if he had to advance his own capital for this purpose. The reduction of the rate of profit is smaller, because the advanced capital is smaller.

So far, then, the selling price is made up of B + K + profits on B + K. This portion of the selling price offers no further difficulties. But now b, the variable capital advanced by the merchant, enters into this consideration.

The selling price is then made up of B + K + b + profits on B + K + profits on b.

B makes good merely the purchase price and adds nothing to this price but the profit on B. K adds K itself plus a profit on K; but K + profit on K, the circulation cost advanced in the form of constant capital plus a corresponding average profit, would be larger in the hands of the industrial capitalist than it is in those of the merchant. The reduction of the average profit assumes this form: It is as though the full average profit had been calculated, after deducting B + K from the advanced industrial capital, but the deduction from this average profit for B + K paid to the merchant, so that this deduction appears as the profit of a particular class of capital, of merchant's capital.

But it is different with b + profits on b, or in the present case, where we have assumed a rate of profit of 10%, with $b + \frac{1}{10}b$. Here lies the real difficulty.

What the merchant buys with b, is according to our assumption nothing but commercial labor, in other words, labor required for the promotion of the functions of circulating the capital, of performing the acts C — M and M — C. But this commercial labor is that labor, which is generally necessary, in order that any capital may perform the functions of

commercial capital, the conversion of commodity-capital into money and money into commodities. It is labor which realises values, but does not create any. And only to the extent that a capital performs this function — that a capitalist performs these operations with his capital — does this capital serve as commercial capital and participate in the regulation of the general rate of profit, that is, draw its dividend out of the total profit. But in b + profit on b, it looks as though labor were being paid, in the first place (for it makes no difference, whether the industrial capitalist pays the merchant for his own labor or the clerk employed by the merchant for his), and in the second place, as though it contained a profit on labor, which the merchant himself has to perform. The merchant's capital gets in the first place its b refunded, and in the second place a profit on it. This arises from the fact that it demands pay, in the first place, for work, which it performs in its capacity as *merchant's* capital, and that it receives, in the second place, a profit in its capacity of *capital*, for performing work, which is remunerated in the profit as the function of capital. This, then, is the question which we have to solve.

Let us assume that B = 100, b = 10, and the rate of profit = 10%. We place K = 0, in order to leave this element of the purchase price, which does not belong here and has already been accounted for, out of consideration. In that case, the selling price would be B + p + b + p (or B + Bp′ + b + bp′); where p′ stands for the rate of profit. This means in figures 100 + 10 + 10 + 1 = 121.

Now, if b would not be invested by the merchant in wages — since b is paid only for commercial labor, for labor required for the realisation of the value of commodity-capital thrown on the market by industrial capital — then the condition of the matter would be the following: In order to buy or sell anything for B = 100, the merchant would spend his time, and we will assume, that this is the only time at his disposal. The commercial labor represented by b, or 10, if paid for by a profit instead of wages, would presuppose another commercial capital of 100, which, at 10%, would be

equal to b = 10. This second B of 100 would not be added to the price of commodities, but the 10% would. We should then have two operations with 100, making 200, that would buy commodities at 200 + 20 = 220.

Since merchant's capital is nothing but an independent form of a portion of industrial capital engaged in the process of circulation, all questions referring to it must be solved by representing the problem at first in that form, in which the phenomena peculiar to merchant's capital do not yet appear in an independent shape, but still in direct connection with industrial capital as one of its subdivsions. As an office separate from the workshop, the mercantile capital serves continually in the process of circulation. It is here that we must first analyse the b under consideration — in the office of the industrial capitalist himself.

The office is from the outset always infinitesimally small compared to the industrial workshop. For the rest, it is clear that the commercial operations increase to the extent that the scale of production is enlarged. These are operations, which must be continually performed for the circulation of the industrial capital, in order to sell the product existing in the shape of commodities, to convert the money so received once more into means of production, and to keep account of the whole. The calculation of prices, bookkeeping, managing funds, carrying on the correspondence, all these belong under this head. The more developed the scale of production is, the greater, if not in proportion, will be the commercial operations of industrial capital, and consequently the labor and other costs of circulation for the realisation of value and surplus-value. This necessitates the employment of commercial wage workers, who form the office staff. The expenses for these, although incurred for wages, differ from the variable capital invested in the purchase of productive labor. It increases the expenses of the industrial capitalist, the mass of capital to be advanced, without increasing the direct surplus-value. For these expenses are made for labor, which is employed only for the realisation of already created values. Like every expense of this kind, these expenses reduce the

rate of profit, because the advanced capital increases, but not the surplus-value. If the surplus-value s remains constant, while the advanced capital C increases to C + △ C, then the place of the rate of profit $\frac{s}{C}$ is taken by the smaller rate of profit $\frac{s}{C + \triangle C}$. For this reason, the industrial capitalist endeavors to limit these expenses of circulation to a minimum, just as he does with his expenses for constant capital. Hence industrial capital does not maintain the same relations to its commercial wage laborers that it does to its productive wage laborers. The greater the number of productive wages laborers employed under otherwise equal circumstances, the more voluminous is production, the greater the surplus-value or profit. On the other hand, the larger the scale of production, the greater the quantity of value and surplus-value to be realised, the greater, in other words, the produced commodity-capital, the larger grow the absolute office expenses, even if they do not grow relatively, and give rise to some kind of division of labor. To what extent profit is the first condition for these expenses, is shown among other things by the fact, that with the increase of commercial salaries a part of them is frequently paid by a share in the profits. It is in the nature of things that labor consisting merely of intermediary operations, which are connected either with a calculation of values, or with their realisation, or with the reconversion of the realised money into means of production, a labor whose amount depends on the quantity of produced values about to be realised, should not act as cause of the respective magnitudes and masses of these values, as directly productive labor does, but as their result. The case of the other costs of circulation is similar. In order that plenty may be measured, weighed, wrapped, transported, plenty must be supplied. The amount of labor consumed in packing, transporting, etc., depends on the quantity of the commodities which are the objects of its activity, not vice versa.

The commercial laborer does not produce any surplus-value directly. But the value of his labor is determined by the value of his labor-power, that is, of its costs of production, while the application of this labor-power, its exertion, ex-

pression, and consumption, the same as in the case of every other wage laborer, is by no means limited by the value of his labor-power. His wages are therefore not necessarily in proportion to the mass of profits, which he helps the capitalist to realise. What he costs the capitalist and what he makes for him are two different things. He adds to the income of the capitalist, not by creating any direct surplus-value, but by helping him to reduce the costs of the realisation of surplus-value. In so doing, he performs partly unpaid labor. The commercial laborer, in the strict meaning of the term, belongs to the better paid classes of wage workers, he belongs to the class of skilled laborers, which is above the average. However, wages have a tendency to fall, even in proportion to the average labor, with the advance of the capitalist mode of production. This is due to the fact that in the first place, division of labor in the office is introduced; this means that only a onesided development of the laboring capacity is required, and that the cost of this development does not fall entirely on the capitalist, since the ability of the laborer is developed through the exercise of his function and increases so much faster, the more onesidedly the division of labor develops. In the second place, the necessary preparation, such as the learning of commercial details, languages, etc., is more and more rapidly, easily, generally, cheaply reproduced with the progress of science and popular education, to the extent that the capitalist mode of production organises the methods of teaching, etc., in a practical manner. The generalisation of public education makes it possible to recruit this line of laborers from classes that had formerly no access to such education and that were accustomed to a lower scale of living. At the same time this generalisation of education increases the supply and thus competition. With a few exceptions, the labor-power of this line of laborers is therefore depreciated with the progress of capitalist development. Their wages fall, while their ability increases. The capitalist increases the number of these laborers, whenever he has more value and profits to realise. The increase of this labor

is always a result, never a cause of the augmentation of surplus-value.[40]

We see, then, that a duplication takes place here. On the one hand, the functions of commodity-capital and money-capital (which later become merchant's capital) are general forms assumed by industrial capital. On the other hand, particular capitals, and therefore a particular series of capitalists, are exclusively devoted to these functions. And these functions develop into specific spheres of enhancing the value of capital.

The commercial functions and expenses of circulation become independent only in the case of the mercantile capital. That side of industrial capital, which is devoted to the circulation, exists not only in its continuous shape of commodity-capital and money-capital, but also in the office alongside of the workshop. But it assumes an independent existence in the mercantile capital. For this capital, its office is its only workshop. The portion of capital employed in the form of expenses of circulation appears much larger in the business of the large merchant than in that of the industrial capitalist, because the offices connected with every industrial workshop are concentrated in the hands of a few merchants, and so is at the same time that portion of the capital, which would have to be invested for this purpose by the entire class of industrial capitalists. These merchants take care of the circulation and provide for the expenses incidental to its continuation.

For the industrial capital, the expenses of circulation appear as dead expenses, and so they are. For the merchant they appear as a source of his profit, which is proportional to

[40] How well this prognosis of the fate of the commercial proletariat, written in 1865, has stood the test can be corroborated by hundreds of German clerks, who, trained in all commercial operations and acquainted with three or four languages, in vain offer their services in London City at 25 shillings per week, far below the wages of a good machine maker. A blank of two pages in the manuscript indicates, that this point was to be further elaborated. For the rest, we refer the reader to volume II, chapter VI (*The Expenses of Circulation*), where various things belonging under this head have already been discussed.— F. E.

the level of the average rate of profit, whose existence is assumed. The investment to be made by the mercantile capital for these expenses of circulation is, therefore, a productive investment. And for this reason the commercial labor which it buys is likewise immediately productive for it.

CHAPTER XVIII.

THE TURN-OVER OF MERCHANT'S CAPITAL. THE PRICES.

The turn-over of industrial capital is the combination of its time of production and time of circulation. It comprises, therefore, the process of production as a whole. The turn-over of merchant's capital, on the other hand; being in reality nothing but a movement of commodity-capital in an independent form, represents merely the first phase in the metamorphosis of commodities, C — M, as a movement of some capital returning to itself. M — C, C — M, is the turn-over of merchant's capital from the mercantile point of view. The merchant buys, converts his money into commodities, then sells, converts the same commodities back into money. And so forth in continuous repetitions. Within the circulation, the metamorphosis of industrial capital always presents itself in the form of C′ — M — C″; the money realised by the sale of the produced commodities C″ is used for the purchase of new means of production C″. This amounts to a practical exchange of C′ for C″, and the same money thus changes hands twice. Its movement acts as an intermediary between two different kinds of commodities C′ and C″. But in the case of the merchant, it is the same commodity, which changes hands twice in the process M — C — M′. It merely promotes the reflux of his money to him.

For instance, if a certain merchant's capital is 100 p.st., and the merchant buys for these 100 p.st. commodities and sells these commodities for 110 p.st., then his capital of 100 p.st. has completed one turn-over, and the number of its turn-overs in one year depends on the number of times which it can repeat this movement M — C — M′.

We leave entirely out of consideration at this point those expenses, which may be concealed in the difference between the purchase price and the selling price, since these expenses do not alter in any way the form, which we are now analysing.

The number of turn-overs of a certain merchant's capital shows evidently some analogy to the repeated cycles of money in its capacity as a mere medium of circulation. Just as the same dollar, which circulates ten times, buys ten times its value in commodities, so the same money-capital of the merchant, when turned over ten times, buys ten times its value in commodities, or realises a total commodity-capital of ten times its value, for instance a merchant's capital of 100 a value of 1,000. But there is this difference: In the circulation of money as a medium of circulation, it is the same piece of money, which passes through different hands and performs repeatedly the same function, thereby making up for the limited number of the circulating pieces of money by the velocity of its circulation. But in the case of the merchant it is the same money-capital, the same money-value regardless of the pieces of money of which it may be composed, which repeatedly buys and sells the amount of its value, thereby returning repeatedly to the same hands from which it departed as M + $\triangle$ M, value plus surplus-value. This is characteristic of its turn-over as a turn-over of capital. It always withdraws more money from circulation than it threw into it. By the way, it is a matter of course that an accelerated turn-over of merchant's capital (in which the function of money as a means of payment likewise predominates whenever the credit system is developed) is accompanied by a more rapid circulation of the same quantity of money.

A repeated turn-over of commercial capital, however, never expresses anything else but a repetition of buying and selling; while a repeated turn-over of industrial capital expresses the periodicity and renovation of the entire process of reproduction (which includes the process of consumption). For the merchant's capital, this appears merely as an outward condition. The industrial capital must continually throw com-

commodities on the market and withdraw others from it, in order that the turn-over of merchant's capital may continue rapidly. If the process of reproduction proceeds slowly in general, then the turn-over of merchant's capital does likewise. Now, it is true that the merchant's capital promotes the turn-over of the productive capital, but only in so far as it shortens the time of circulation of the latter. It has no direct influence on the time of production, which is also one of the limits of the time of turn-over of industrial capital. This is the first barrier for the turn-over of merchant's capital. In the second place, aside from the barrier formed by reproductive consumption, the turn-over of the merchant's capital is ultimately limited by the velocity and volume of individual consumption, since the entire part of commodity-capital which passes into the fund for consumption depends on that.

However, aside from the turn-overs in the world of merchants, in which one merchant always sells the same commodity to another, whereby this sort of circulation may assume the aspect of great prosperity during times of speculation, the merchant's capital abbreviates in the first place the phase C — M for the productive capital. In the second place, under the modern credit system, it disposes of a large portion of the total capital of society, so that it can repeat its purchases even before it has definitely sold its previous purchases. And it is immaterial in this case, whether the merchant sells directly to the ultimate consumer, or whether a dozen other merchant's intervene between the first merchant and the ultimate consumer. Owing to the immense elasticity of the process of reproduction, which at any time may be driven beyond all bounds, this process finds no obstacle in production itself, or at best a very elastic one. Aside from the connection of C — M and M — C, which follows from the nature of commodities, a fictitious demand is here created. In spite of its independent status, the movement of merchant's capital is never anything else but the movement of industrial capital within the sphere of circulation. But thanks to its independentisation it moves within certain limits independ-

ently of the bounds of the process of reproduction, and thereby drives this process itself beyond its boundaries. The internal dependence and the external independence drive merchant's capital to a point, where the internal connection is violently restored by a crisis.

Hence we note the phenomenon that crises do not originate themselves, nor break forth, first in the retail business, which deals with direct consumption, but in the spheres of wholesale business and banking, by which the money capital of society is placed at the disposal of wholesale business.

The manufacturer may actually sell to the exporter and the exporter may in his turn sell to his foreign customer, the exporter may sell his raw materials to the manufacturer, and the manufacturer his products to the wholesale dealer. But at some particular and unseen point, the goods are left unsold. On some other occasion, again, the supplies of all producers and middle men may become gradually overstocked. Consumption is then generally at its best either because the industrial capitalist sets a succession of others in motion, because the laborers employed by them are fully employed and spend more than ordinarily. With the growing income of the capitalists their expenditures increase likewise. [illegible] have seen in volume II, Part III, that a continuous circulation takes place between constant capital and constant capital (even without considering any accelerated accumulation), which is in so far independent of individual consumption, as it never enters into such consumption, but which is nevertheless definitely limited by it, because the production of constant capital never takes place for its own sake, but solely because a part of this capital is needed in those spheres of production whose products pass into individual consumption. However, this may proceed undisturbed for a while, stimulated by progressive demand, and in such lines the business of merchants and industrial capitalists prospers exceedingly. A crisis comes whenever the returns of those merchants, who sell at a long range, or whose supplies have accumulated also on the home market, become so slow and meager, that the banks press for payment, or the notes for the purchased commodities become

due before they have been resold. It is then that forced sales take place, sales made in order to be able to meet payments. And then we have the crash, which brings the deceptive prosperity to a speedy end.

But the superficiality and meaninglessness of the turn-over of merchant's capital are still greater, because the turn-over of one and the same merchant's capital may promote simultaneously or successively the turn-overs of several productive capitals.

Now, the turn-over of merchant's capital may not only promote the turn-overs of several industrial capitals, but also the opposite phase of the metamorphosis of commodity-capital. For instance, the merchant buys linen from the manufacturer and sells it to the bleacher. In this case, the turn-over of the same merchant's capital — in fact, the same C — M, a realisation on the linen — represents two opposite phases for two different industrial capitals. So far as the merchant sells at all for productive consumption, his C — M always means M — C for some industrial capitalist, and his M — C always C — M for some other industrial capitalist.

If we leave out of consideration, as we do in this chapter, K, the expenses of circulation, in other words, if we leave aside that portion of capital which the merchant advances apart from the money required for the purchase of commodities, it follows that $\wedge$ K, the additional profit made on this additional capital, will likewise be left out. This is the strictly logical and mathematically correct mode of analysis, if we wish to study the way in which the profits and turn-over of merchant's capital affect prices.

If the price of production of 1 lb. of sugar is 1 p.st., the merchant can buy 100 lbs. of sugar with 100 p.st. If he buys and sells this quantity in the course of one year, and if the annual rate of average profit is 15% he would add 15 p.st. to 100 p.st., and 3 sh. to the price of production of 1 lb. of sugar, 1 p.st. That is, he would sell one pound of sugar at 1 p.st. 3 sh. But if the price of production of 1 lb. of sugar should fall to 1 sh., then the merchant could buy 2,000 lbs. of sugar with 100 p.st., and he could sell the sugar at 1

sh. 1⅘ d. per lb. The annual profit on capital invested in the sugar business would still be 15 p.st. on each 100 p.st. Only he has to sell 100 lbs. in the first case, while he must sell 2,000 lbs. in the second place. The high or low level of the price of production would not have anything to do with the rate of profit. But it would have a great deal, or even a decisive deal, to do with that aliquot part of the selling price of each lb. of sugar which resolves itself in mercantile profit; in other words, it would have a great deal to do with the addition to the price which the merchant makes on a certain quantity of commodities, or products. If the price of production of a certain commodity is small, then the amount advanced by the merchant for the purchase of a certain quantity of that commodity is also small, and so is the amount of profit made by him on this quantity of cheap commodities. Or, what amounts to the same, he can buy with a certain amount of capital, for instance with 100, a large quantity of these commodities, and the total profit of 15, which he makes on 100, will be distributed in small fractions over each individual portion of this mass of commodities. The opposite takes place in the opposite case. This depends entirely on the greater or smaller productivity of the industrial capital, with whose products he trades. If we except the cases, in which the merchant is a monopolist and monopolises at the same time the production of certain goods, as did the Dutch East India Company once upon a time, we must say that there is nothing more ridiculous than the current idea that it depends on the merchant whether he wants to sell many commodities at a small profit or few commodities at a large profit on the individual commodities. The two limits of his selling price are: On one hand, the price of production of commodities, over which he has no control; on the other hand, the average rate of profit, over which he has also no control. The only thing which he has to decide is whether he wants to deal in cheap or in dear commodities, and even here the size of his available capital and other circumstances have something to say. Therefore it depends wholly on the degree of development of the capitalist mode of production, not on the good will of the merchant,

what course he shall follow in this. A purely commercial company like the old Dutch East India Company, which had a monopoly of production, could imagine that it would be able to continue a method, adapted at best to the beginnings of capitalist production, under entirely changed conditions.[41]

The following circumstances, among others, help to maintain this popular prejudice, which, like all wrong conceptions of profit, etc., arise out of the views of pure commerce:

1) Phenomena of competition, which, however, concern merely the distribution of mercantile profit among the individual merchants in their capacity as shareholders in the total merchant's capital; such as the underselling of other merchants by one of them for the purpose of beating his competitors.

2) An economist of the caliber of Professor Roscher of Leipsic may still imagine that a change in the selling prices may be brought about by considerations of "prudence and humanity," instead of being due to a revolution in the mode of production itself.

3) If the prices of production fall on account of an increased productivity of labor, and if consequently the selling prices also fall, then the demand, and with it the market prices, often rise even faster than the supply, so that the selling prices yield more than the average profit.

4) A merchant may reduce his selling price (which amounts after all to no more than a reduction of the current profit which he adds to the price) in order to turn over a large capital more rapidly in his business.

All these things concern only competition between merchants themselves.

We have already shown in volume I, that the high or low

[41] "Profit, on the general principle, is always the same, whatever be price; keeping its place like an incumbent body on the swelling or sinking trade. As, therefore, prices rise, a tradesman raises prices; as prices fall, a tradesman lowers it." (Corbet, *An Inquiry into the Causes, etc., of the Wealth of Individuals.* London, 1845, p. 15.) Here, as in the text of our work generally, we speak only of ordinary commerce, not of speculation. The analysis of speculation, as well as everything else pertaining to the division of mercantile capital, falls outside of the circle of our inquiry. "The profit of trade is a value added to capital which is independent of price, the second (speculation) is founded on the variation in the value of capital or in price itself." (L. c., p. 12.)

level of the prices of commodities determines neither the amount of surplus-value produced by a certain capital nor the rate of surplus-value; it is merely true that, according to the relative quantity of commodities produced by a certain quantity of labor, the price of the individual commodity, or rather it the share of surplus-value falling upon this price, is greater or smaller. The prices of every quantity of commodities are determined, so far as they correspond to their value, by the total quantity of labor incorporated in these commodities. If much labor is incorporated in few commodities, then the price of the individual commodities is low and the surplus-value contained in them is small. No matter in what proportion the labor incorporated in a commodity is divided into paid and unpaid labor, and no matter what portion of its price may represent surplus-value, it has nothing to do with the total quantity of this labor, nor, consequently, with its price. On the other hand, the rate of surplus-value does not depend on the absolute magnitude of the surplus-value contained in the price of the individual commodity, but on its relative magnitude, on its proportion to the wages contained in the same commodity. The rate of surplus-value may therefore be large, while the absolute magnitude of the surplus-value in each individual commodity may be small. This absolute magnitude of the surplus-value in each commodity depends in the first place on the productivity of labor, and only in the second place on its division into paid and unpaid labor.

Moreover, in the case of the commercial selling price, the price of production is a condition determined by external circumstances.

The high prices of commerce in former times were due 1) to the dearness of the prices of production, in other words, to the unproductivity of labor; 2) to the absence of an average rate of profit, which enabled the merchant's capital to absorb a much larger quantity of the surplus-value than would have fallen to its share, had the capitals enjoyed a greater general mobility. The cessation of this condition, in both its aspects, is due to the development of the capitalist mode of production.

The turn-overs of merchant's capital vary in length, their numbers consequently are greater or smaller, in different lines of commerce. Within the same line of commerce, the turn-over is more or less rapid in different phases of the economic cycle. However, an average number of turn-overs, which is found by experience, takes place.

We have already noted, that the turn-over of merchant's capital differs from that of industrial capital. This follows from the nature of the case; one single phase in the turn-over of industrial capital appears as a complete turn-over of some independently constituted merchant's capital, or of a part of some such merchant's capital. This turn-over has also a different relation to the determination of profit and prices.

In the case of the industrial capital, its turn-over expresses on one hand the periodicity of reproduction, and on it depends the mass of commodities, which may be thrown on the market in a certain period. On the other hand, its time of circulation forms a barrier, which is elastic and exerts more or less of a restraint on the creation of value and surplus-value, because it exerts a pressure on the volume of the process of production. The turn-over therefore acts as a determining element on the mass of annually produced surplus-value, and thus helps to determine the average rate of profit, but it acts as a negative, not as a positive element. For the merchant's capital, however, the average rate of profit exists as a given magnitude. The merchant's capital does not directly participate in the creation of value or surplus-value, and it participates in the formation of an average rate of profit only to the extent that draws a dividend, in proportion to its size in the total social capital, out of the mass of profit produced by the industrial capital.

The greater the number of turn-overs of a certain industrial capital is under the conditions described in Volume II, Part II, the greater is the mass of profits created by it. Now, the formation of an average rate of profit distributes the total profit among the different capitals, not in proportion to their actual participation in its direct production, but in proportion

to the aliquot parts which they constitute in the total capital, that is, in proportion to their magnitudes. But this does not alter the essence of the matter. The greater the number of turnovers of the industrial capital as a whole is, the greater is the mass of profits, the mass of annually produced surplus-value, and therefore the rate of profit, always assuming other circumstances to remain unchanged. It is different with merchant's capital. For it, the rate of profit is a given magnitude, determined on one hand by the mass of profit produced by the industrial capital, on the other hand by the relative magnitude of the total merchant's capital, by its quantitative relation to the sum of capital advanced in the processes of production and circulation. The number of its turn-overs does indeed exert a determining influence on its relation to the total social capital, or on the relative magnitude of the total merchant's capital required for the circulation. For it is evident that the absolute magnitude of the total merchant's capital and the velocity of its turn-over are inversely proportioned to one another. But, all other circumstances remaining the same, the relative magnitude of the merchant's capital, or its aliquot proportion in the total social capital, is determined by its absolute magnitude. If the total social capital is 10,000, and the merchant's capital 1,000, then it is $\frac{1}{10}$ of the total; if the total capital is 1,000, and the merchant's capital 100, it is again $\frac{1}{10}$. To that extent, the absolute magnitude of the merchant's capital may vary, while its relative magnitude in the total social capital remains the same. But in the present case, we assume that its relative magnitude of $\frac{1}{10}$ of the total social capital is given. This relative magnitude, again, is determined by its turn-over. If it is turned over rapidly, its absolute magnitude will be 1,000 in the first case, and 100 in the second, so that its relative magnitude will be $\frac{1}{10}$. But if it is turned over more slowly, then its absolute magnitude may be 2,000 in the first case, and 200 in the second case. Then its relative magnitude will have increased from $\frac{1}{10}$ to $\frac{1}{5}$ of the total social capital. Circumstances which reduce the average turn-over of merchant's capital, for instance, the development of means of transportation, reduce to that extent the

absolute magnitude of merchants' capital and thereby increase the average rate of profit. The opposite takes place, if things are reversed. A developed mode of capitalist production, compared to previous conditions, exerts a twofold influence on merchants' capital. In the first place, the same quantity of commodities is turned over with a smaller mass of actually functioning merchants' capital; for the proportion of the merchants' capital to industrial capital is reduced by the more rapid turn-over of merchants' capital and the greater velocity of the process of reproduction that is its basis. On the other hand, the development of the capitalist mode of production turns all production into a production of commodities, which puts all products into the hands of the agents of circulation. This is so much more notable, as under previous modes of production, which produced things on a small scale, a large portion of the producers sold their goods directly to the consumers or worked for their personal orders, leaving out of consideration that mass of products, which were immediately consumed by the producer himself, and that mass of services, which were performed *in natura*. While, therefore, under former methods of production, commercial capital represented proportionately a larger share of the commodity-capital which it turned over, it was.

1) absolutely smaller, because a disproportionately smaller part of the total product was produced in the shape of commodities, passed as commodity-capital into circulation, and fell into the hands of merchants. It was smaller, because the commodity-capital was smaller. But it was proportionately larger, not only because its turn-over was slower, and because it constituted a larger portion of the mass of commodities turned over by it, but also because the price of this mass of commodities, and consequently the merchants' capital to be advanced for it, were greater than under capitalist production on account of a lower productivity of labor, so that the same value was incorporated in a smaller mass of commodities.

2) Not alone is a larger mass of commodities produced on the basis of capitalist production (taking account also of the reduced value of these commodities), but the same mass of

products, for instance, of corn, also becomes to a greater extent commodity, that is, more and more of the product becomes an object of commerce. As a consequence, not only the mass of the merchants' capital, but of all capital invested in the circulation, increases, such as capital invested in marine shipping, railroading, telegraph business, etc.;

3) However, there is one point of view, which belongs in the discussion of "competition among capitals," namely: The merchants' capital, which is not serving in any function, or serving only in part, grows with the progress of the capitalist mode of production, with the facility of its investment in retail trade, with the increase of speculation, and with the superfluity of released capital.

But, assuming the relative magnitude of the merchants' capital in proportion to the social capital to be given, the difference of the turn-overs in the various lines of commerce does not affect the magnitude of the total profit falling to the share of the total merchants' capital, nor the general rate of profit. The profit of the merchant is determined, not by the mass of the commodity-capital turned over by him, but by the magnitude of the money-capital advanced by him for the promotion of this turn-over. If the yearly general rate of profit is 15%, and the merchant advances 100 p.st., which he turns over once a year, then he will sell his commodities at 115. If his capital is turned over five times per year, then he will sell a commodity-capital of 100 purchase price five times per year at 103, which will amount in one year to a commodity-capital of 500 sold 515. This constitutes the same annual profit of 15% on his advanced capital of 100 as before. If this were not so, then the merchants' capital would yield a much higher profit in proportion to the number of its turn-overs than the industrial capital, and this would be a contradiction to the law of the average rate of profit.

It follows, then, that the number of turn-overs of merchants' capital in the various lines of commerce affects the mercantile prices of commodities directly. The amount of the mercantile addition to the price, the addition of that aliquot part of the mercantile profit of a given capital which

falls upon the price of production of the individual commodities, stands in an inverse ratio to the number of turn-overs, or the velocity of turn-over, of the merchants' capitals in the various lines of commerce. If a certain merchants' capital is turned over five times per year, it will add to a commodity-capital of its own value but one-fifth of the profit, which another merchants' capital of the same value, which is turned over but once per year, will add to a commodity-capital of the same value.

This modification of selling prices by the average time of turn-over of the capitals in different lines of commerce amounts to this: In proportion to the velocity of turn-over, the same mass of profits, which is determined by the annual rate of average profit for any given magnitude of merchants' capital, independently of the specific commercial character of the operations of this capital, is differently distributed over masses of commodities of the same value. For instance, if the merchants' capital is turned over five times per year, it will add $\frac{15}{5} = 3\%$ to the price of commodities, and if turned over once per year, it will add 15% to their price.

The same percentage of the commercial profit in different lines of industry, according to the proportions of their times of turn-over, increases the selling prices of commodities by different percentages calculated on their values.

On the other hand, in the case of industrial capital, the time of turn-over does not affect in any way the magnitude of the value of the individual commodities produced during that time, although it does affect the mass of value and surplus-value produced in a given time, because it affects the mass of exploited labor. This is indeed concealed and seems to be otherwise, as soon as one has an eye only to the prices of production. But this is due solely to the fact that, according to the previously analysed laws, the prices of production of the various commodities deviate from their values. As soon as we look upon the process of production in its totality, upon the mass of commodities produced by the entire industrial capital of society, we shall find the general law vindicated.

We see then, that a closer inspection of the influence of the

time of turn-over on the formation of the values leads us back, in the case of the industrial capital, to the general law and to the basis of political economy, to-wit, the law that the values of commodities are determined by the labor time contained in them. But the influence of the turn-overs of merchants' capital on the mercantile prices reveals phenomena, which, without a very lengthy analysis of the connecting links, seem to point to a purely arbitrary fixing of prices. They seem to be fixed purely on the intention that a certain capital should make a definite quantity of profits in one year. Particularly it looks, on account of this influence of the turn-overs, as though the process of circulation determined by itself the prices of commodities, independently, within certain limits, of the process of production. All superficial and false conceptions of the process of reproduction as a whole arise from the point of view of merchants' capital and from the conceptions, which its peculiar movements call forth in the minds of the agents of circulation.

If it is realised — and the reader will have realised it to his great dismay — that the analysis of the actual internal interconnections of the capitalist process of production is a very complicated matter and a very protracted work; if it is a work of science to resolve the visible and external movement into the internal actual movement, then it is understood as a matter of course, that the conceptions formed about the laws of production in the heads of the agents of production and circulation will differ widely from these real laws and will be merely the conscious expression of the apparent movements. The conceptions of a merchant, a stock gambler, a banker, are necessarily quite perverted. Those of the manufacturer are vitiated by the acts of circulation, to which their capital is subject, and by the compensation of the general rate of profit.[42]

Competition likewise plays a completely perverted role in these heads. If the limits of value and surplus-value are

[42] It is a very naive, but also very correct remark that "Surely the fact that one and the same commodity may be had from different sellers at considerably different prices is frequently due to mistakes of calculation." (Feller and Oldermann, *Das Ganze der kaufmannischen of Arithmetik*, 7. Aufl., 1859.) This shows how purely theoretical, that is abstract, the determination of prices becomes.

given, then it is easy to understand, in what manner the competition of capitals will transform values into prices of production and further into mercantile prices, and surplus-value into average profit. But without these limits, we cannot see any reason at all, why competition should reduce the average rate of profit to such and such a level instead of some other, should make it 15% instead of 1,500%. Competition at best can only reduce the rate of profit to one and the same level. But it does not contain any element, by which this level could be determined.

From the point of view of merchants' capital, the turn-over itself takes on the guise of a determining element of prices. On the other hand, while the velocity of the turn-over of industrial capital, in so far as it enables a certain industrial capital to exploit more or less labor, exerts a determining and limiting influence on the mass of profit and thus on the average rate of profit, this rate of profit exists as an external fact for the merchants' capital, and the internal connection of this rate with the production of surplus-value is entirely obliterated. If the same industrial capital, under otherwise equal circumstances, particularly with the same organic composition, is turned over four times per year instead of twice, it produces twice as much surplus-value and, consequently, profit. And this becomes palpable, as soon and so long as this capital has the monopoly of that improved mode of production, to which it owes its accelerated turn-over. Vice versa, differences in the times of turn-over in different lines of commerce manifest themselves in such a way that the profit made on the turn-over of some given commodity-capital is in an inverse ratio to the number of turn-overs of the money-capital which turns this commodity-capital over. Small profits and quick returns appears particularly to the shopkeeper as a principle, which he follows on principle.

For the rest, it is a matter of course, that this law of turn-overs of merchants' capital holds good in each line of commerce only for the average of turn-overs made by the entire merchants' capital invested in each particular line, and always without a consideration of any succession of alternating and

mutually compensating turn-overs of longer or shorter duration. The capital of A, who deals in the same line as B, may make more or less than the average number of turn-overs. This does not alter the turn-over of the total mass of merchants' capital invested in this line. But this is of decisive moment for the individual merchant or shopkeeper. He makes in this case an extra profit, just as the industrial capitalists make extra profits, if they produce under conditions more favorable than the average. If competition compels him, he can sell cheaper than his competitors without lowering his profit below the average. If the conditions, which would enable him to turn his capital over more rapidly, are themselves for sale, such as a favorable location of the shop, he can pay extra rent for it, that is to say, a portion of his surplus-profit is converted into ground rent.

CHAPTER XIX.

FINANCIAL CAPITAL.

The purely technical movements performed by money in the process of circulation of industrial capital, and, as we may now add, of commercial capital, which assumes a part of the circulation movement of industrial capital as its own peculiar movement,— these movements, if individualised into an independent function of some particular capital that performs nothing but just this service, convert a capital into financial capital. In that case, one portion of the industrial capital, and of commercial capital, persists not only in the form of money, of money capital in general, but as money-capital, which performs only these technical functions. A definite part of the total social capital separates from the rest and individualises itself in the form of money-capital, whose capitalist function consists exclusively in performing the financial operations for the entire class of industrial and commercial capitalists. As in the case of the commercial capital, so in that of financial capital a portion of the industrial capital in process of function in circulation separates from the rest and

performs these operations of the process of reproduction for all the other capital. These movements of such money-capital, then, are once more merely movements of an individualised part of industrial capital in the process of reproduction.

Capital appears as the first and last point of this movement only to the extent that capital is newly invested, as happens in accumulation. But for every capital, which is already in process, this first and last point appear merely as points of transit. To the extent that industrial capital, from the moment of its exit from the sphere of production to that of its return to it, passes through the metamorphosis C′ — M — C, M represents merely the final result of one phase of this metamorphosis and becomes at once the starting point of its supplementing second phase, as we have already seen in the discussion of the simple circulation of commodities. And although the C — M of industrial capital signifies always M — C — M for the commercial capital, nevertheless the actual process for this last named capital, once that it has become engaged, is also C — M — C. But the commercial capital passes continually through and simultaneously through the acts C — M and M — C, that is to say, there is not only one capital in the stage C — M, while another is in the stage M — C, but the same capital buys continually and sells continually at the same time, on account of the continuity of the process of production. It is continually and simultaneously in both stages. While one of its parts is converted into money, to be reconverted later into commodities, another is simultaneously converted into commodities, to be reconverted into money.

Whether the money serves here as a means of circulation or of payment, depends on the form of the exchange of commodities. In both cases, the capitalist has to pay out money continually to many persons, and to receive money continually from many persons. This purely technical labor of paying money and receiving money constitutes an employment by itself, which necessitates the making of balances, the balancing of accounts, so far as money serves as a means of payment. This labor belongs to the expenses of circulation, it does not

create any values. It is abbreviated by being organised as a special department of agents, or capitalists, who perform this work for all the rest of the capitalist class.

A definite portion of the capital must be continually available as a hoard, as potential money-capital. It constitutes a reserve of means of purchase, a reserve of means of payment, unemployed capital in the form of money waiting to be put to work. And one portion of the capital continually returns in this form. This requires not only the collecting, paying, and bookkeeping operations, but also the storing of a hoard, which constitutes an operation by itself. This work consists indeed in a continual conversion of a hoard into means of circulation and means of payment, and its restoration to the form of a hoard by means of money secured through sales and due payments. This continuous movement of that part of capital, which exists in the form of money, separated from the function of capital itself, this purely technical function causes its own labors and expenses, which belong to the expenses of circulation.

The division of labor brings it about, that these technical operations, which are conditioned on the functions of capital, should be performed as much as possible for the entire capitalist class by one class of agents, or capitalists, into whose hands it is concentrated as their exclusive function. We have here, as in the case of commercial capital, a division of labor in a twofold sense. It becomes a special business, and because it is performed as a special business for the money-mechanism of the whole class, it is concentrated and performed on a large scale. And then a further division of labor takes place within this special business, on one hand by a separation into various independent lines, on the other by a segmentation of the work within each office of these special lines. Large offices, many bookkeepers and cashiers, far going division of labor, disbursing of money, receiving of money, balancing of accounts, keeping of current accounts, storing of money, etc., all these things, separated from the acts that necessitate these technical operations, make of the capital advanced for these functions a financial capital.

The various operations, whose individualisation gives rise to special lines of financial business, follow from the different capacities of money itself and from its different functions, through which capital in its money-form must likewise pass.

I have pointed out on a previous occasion, that the money business in general developed originally from an exchange of products between different communes.[43]

The financial business, the trade with money as a commodity, developed first out of international commerce. As soon as different national coins exist, the merchants buying in foreign countries must exchange their national coins into foreign coins, and vice versa, or exchange different coins for uncoined pure silver or gold as international money. This gives rise to the business of money-exchange, which is one of the primitive foundations of modern financial business.[44] Out of it developed the modern banks of exchange, in which silver (or gold) serve as world money — now called bank money or commercial money — as distinguished from current money.

[43] *Critique of Political Economy*, p. 53.

[44] "The great differences of coins themselves, as concerns their grain, and their coinage by many privileged princes and towns, necessitated the establishment of a business, which should enable merchants to use local money wherever any compensation between different coins was necessary. In order to be able to make cash payments, merchants who traveled to a foreign market provided themselves with uncoined pure silver, or perhaps with gold. In the same way they exchanged the money received by them in local markets for uncoined silver or gold, when they prepared to return home. The business of exchanging money, the exchange of uncoined precious metals for local coins, and vice versa, thus became a widespread and paying business." (Hüllmann, *Städtewesen des Mittelalters.* Bonn, 1826–29, I, p. 437.) "Banks of exchange do not owe their name to the fact that they issue bills of exchange, . . . but to the fact that they used to exchange coins. Long before the establishment of the Amsterdam Bank of Exchange in 1609, there existed in the Dutch merchant towns money changers and exchange houses, even exchange banks. . . . The business of these money changers consisted in exchanging the numerous varieties of coin, that were brought into the country by foreign traders, for the current coin of the realm. Gradually their circle of activity extended. . . . They became the bankers and cashiers of modern times. But the government of Amsterdam saw a danger in the combination of the cashier business with the exchange business, and in order to meet this danger, it was resolved to establish a large institution, which should be able to perform both the cashier and the exchange operations. This institution was the famous Amsterdam Bank of Exchange of 1609. In like manner, the exchange banks of Venice, Genoa, Stockholm, Hamburg, owe their origin to the continual necessity of changing money. Of all these, the Hamburg Exchange is the only one that is still doing business, because the need of such an institution is still felt in that merchants' town, which has no Mint of its own. Etc." (S. Vissering, *Handboek van Praktische Staathuishoudkunde.* Amsterdam, 1860, I, 247.)

The business of money-exchange, so far as it consists merely of notes of payment to travelers from one money-exchanger in one country to another in another country, developed as early as Roman and Grecian times out of the simple money-exchange.

The trade with gold and silver as commodities (raw materials for the making of articles of luxury) forms the primitive basis of bullion trade, or of that trade, which promotes the functions of money as world money. These, functions, as previously explained (Volume I, chapter III, 3c), are twofold: A currency back and forth between the various national spheres of circulation for the purpose of balancing the international payments and for performing the migrations of capital in quest of interest; simultaneously with this movement, there is a movement of precious metals from their sources of production across the world market and a distribution of their supply over the various national spheres of circulation. In England, the goldsmiths still served as bankers during the greater part of the 17th century. The way in which the balancing of international accounts in the money trade is further developed, is not discussed here, any more than any points referring to the business of dealing in valuable papers, in short, we leave out of consideration all special forms of the credit system, since this does not yet concern us here.

In the shape of world money, national money strips off its local character; one national money is expressed in another, and thus all of them are finally reduced to their contents in gold or silver, while these two metals, being the two commodities circulating as world money, are simultaneously reduced to their mutual ratios, which change continually. The money trader makes this intermediate business his special occupation. Money changing and bullion trading are thus the primitive forms of the money trade, and they arise from the twofold functions of money as national money and world money.

The capitalist process of production, and commerce in general, even under precapitalist methods, imply:

1) The accumulation of money in the shape of a hoard, that

is, in the present case, the accumulation of that part of capital, which must always be on hand in the form of money, as a reserve fund of means of payment and means of purchase. This is the first form of a hoard, such as it reappears under the capitalist mode of production, and as it forms in general with the development of merchants' capital, at least for the purposes of this capital. These remarks apply to national as well as international circulation. This hoard is in continuous flux, pours ceaselessly into circulation, and returns uninterruptedly from it. The second form of a hoard is now that of fallow, unemployed, capital in the form of money, including newly accumulated and not yet invested money-capital. The functions first required by this formation of a hoard are those of safekeeping, bookkeeping, etc.

2) This is connected by an expenditure of money in buying, its reception on selling, making and receiving of payments, balancing of payments, etc. The money dealer performs all these services at first as a simple cashier of the merchants and industrial capitalists.[45]

[45] "The institution of cashiers has probably nowhere preserved its original and independent character so pure as in the Dutch merchant towns (see on the origin of the cashier business in Amsterdam, E. Lusac, *Hollands Rykdom*, part III). Its functions partly coincide with those of the old Amsterdam Bank of Exchange. The cashier receives from the merchants, who employ his services, a certain amount of money, for which he opens a 'credit' for them in his books. Furthermore they send him their due bills, which he collects for them and credits to their account. On the other hand, he makes payments on their notes (*Kassiers briefjes*) and charges their accounts with their current bills. He charges a small provision for these credits and debits, which yields him a corresponding remuneration for his labor only by the amount of business, which he can turn over between them. If payments are to be balanced between two merchants, who both deal with the same cashier, then such payments are simply settled by booking them mutually, while the cashiers balance their mutual claims from day to day. The cashier's business, then, consists at bottom of this promotion of payments. Therefore it excludes industrial enterprises, speculations, and the opening of blank credits; for it must be a rule in this business that the cashier makes no payment to any one keeping an account with him above his credit." (Vissering, l. c., p. 134.) On the banking associations of Venice: "The requirements and locality of Venice, where the carrying of cash is more inconvenient than in other places, induced the large merchants of that town to found banking associations under due safeguards, supervision, and management. The members of such an association deposited certain sums, on which they drew checks for their creditors, whereupon the paid sum was deducted on the page of the debtor in the book kept for that purpose and added to the sum, which was credited in the same book to the creditor. This is the first beginning of the socalled giro banks. These associations are indeed old. But if they are attributed to the 12th century, they are

Dealing in money is fully developed, even in its first stages, as soon as its ordinary functions of lending and borrowing are supplemented by the credit business. Of this more in the following part, which deals with interest-bearing capital.

The bullion trade itself, the transfer of gold or silver from one country to another, is merely the result of the trade in commodities. It is determined by the quotations of bills of exchange, which express the stand of the international payments and of the rate of interest on the different markets. The bullion trader as such acts but as an intermediary between results.

In discussing the way, in which the movements and forms of money develop out of the simple circulation of commodities, we have seen (Vol. I, chap. III), that the movements of the mass of money circulating as a means of purchase and payment are determined by the metamorphosis of commodities, by the volume and velocity of this metamorphosis. And we know now, that this metamorphosis is itself but a phase in the entire process of reproduction. As for the movement of the raw materials of money — gold and silver — from their places of production, it resolves itself in a direct exchange of commodities, an exchange of gold and silver as commodities for other commodities. Hence it is as much a phase of the exchange of commodities as the securing of iron or other metals by means of exchange. And so far as the movements of precious metals on the world-market are concerned (we leave aside at this point the consideration of their movements to the extent that they express the transfer of capital by loans, a transfer, which takes place also in the shape of commodity-capital), they are quite as much determined by the international exchange of commodities as the movements of money as a national means of purchase and payment are determined by the exchange of commodities on the home market. The emigrations and immigrations of precious metals from one national sphere to another, which are caused by a depreciation of national coins, or by a double standard, are extraneous to

confounded with the State Loan Institute, which was established in 1171." (Hüllmann, l. c. 550.)

the circulation of money as such and represent merely corrections of deviations brought about arbitrarily by state decrees. And finally, as concerns the formation of hoards, which constitute reserve funds for means of purchase and payment, either for the home trade or for foreign trade, and likewise of hoards, which represent merely a form of capital temporarily unemployed, they are both necessary precipitates of the process of circulation.

Just as the entire circulation of money, in its volume, its forms, and movements, is purely a result of the circulation of commodities which in its turn represents from the capitalist point of view only the process of circulation of capital (including the exchange of capital for revenue, and of revenue for revenue, so far as the expenditure of revenue is realised in retail trade), so it is a matter of course, that the trade in money does not promote merely the circulation of money, a mere result and phenomenon of the circulation of commodities. This circulation of money itself, as a phase in the circulation of commodities, is a fundamental requisite for the trade in money. This trade promotes merely the technical operations of money-circulation, concentrating, abbreviating, simplifying them. The trade in money does not form the hoards, but supplies the technical means by which the formation of hoards may be reduced to its economical minimum (so far as it is voluntary, that is, so far as it is not an expression of unemployed capital or of disturbances of the process of reproduction). For if the reserve funds of means of purchase and payment are managed for the capitalist class as a whole, they need not be so large as they would have to be, did each capitalist manage his own. The trade in money does not buy the precious metals, but merely promotes their distribution, as soon as the trade in commodities has bought them. The trade in money facilitates the squaring of balances, so far as money serves as a means of payment, and reduces by the artificial mechanism of these compensations the amount of money required for this purpose. But it determines neither the connections, nor the volume, of the mutual payments. For instance, the bills of exchange and checks, which are exchanged

for one another in banks and clearing houses, reflect quite independent transactions and are the results of real operations. It is merely a question of a better technical compensation of these results. So far as money serves as a means of purchase, the volume and number of purchases and sales are quite independent of the money trade. This trade cannot do anything but abbreviate the technical operations that go with buying and selling, and by this means it is enabled to reduce the amount of cash money required to turn the commodities over.

The money trade in its pure form, which we consider here, that is, the money trade not complicated by the credit system, is concerned only with the technique of a certain phase of the circulation of commodities, namely with the circulation of money and the different functions of money following from its circulation.

This distinguishes the money trade essentially from the trade in commodities, which promotes the metamorphosis of commodities and their exchange, or which gives even to this process the aspect of a process of a certain capital separated from the industrial capital. While, therefore, the commercial capital has its own form of circulation, M — C — M, in which the commodity changes hands twice and thereby recovers the money, in distinction from C — M — C, in which the money changes hands twice and thereby promotes the exchange of commodities, there is no such special form of circulation, which can be demonstrated in the case of financial capital.

To the extent that money-capital is advanced by a separate class of capitalists for the technical promotion of the circulation of money — a capital representing on a reduced scale the additional capital, which the merchants and industrial capitalists must otherwise advance themselves for these purposes — the general form of capital, M — M′, is found also here. By the advance of M, the advancing capitalist secures M + ΔM. But the promotion of the transaction M — M′ does not concern itself in this case with the objective materials, but only with the technical processes of this metamorphosis.

It is evident, that the mass of money-capital, with which the

money dealers have to operate, is the money-capital of the merchants and industrial capitalists in process of circulation, and that the operations of the money dealers are merely those originally performed by the merchants and industrial capitalist.

It is equally evident, that the profit of the money dealers is nothing but a deduction from the surplus-value, since they are operating merely with already realised values (even when they have been realised in the form of creditors' claims).

As in the trade with commodities, so in that with money a duplication of functions takes place. For a portion of the technical operations connected with the circulation of money must be carried out by the dealers and producers of commodities themselves.

CHAPTER XX.

HISTORICAL DATA CONCERNING MERCHANTS' CAPITAL.

The particular form, in which the commercial capital and financial capital accumulate money, will be discussed in the next part of this volume.

From what has gone before it follows as a matter of course that nothing can be more absurd than to consider merchants' capital, whether in the shape of commercial or of financial capital, as some particular kind of industrial capital, such as that invested in mining, agriculture, stock raising, manufacture, transportation, etc., which constitute side lines of industrial capital formed by division of social labor and thus different spheres for its investment. The simple observation, that every industrial capital, when in the circulation phase of its process of reproduction, performs in the shape of commodity-capital and money-capital the very same functions, which appear as exclusive functions of the two forms of merchants' capital, should make such a crude conception impossible. On the other hand, in commercial and financial capital the differences between the productive nature of industrial capital and its functions in the sphere of circulation are independently in-

dividualised, by transferring definite forms and functions assumed momentarily by industrial capital into independent forms and functions of separate portions of capital permanently tied up in circulation. A changed form of industrial capital is widely different from distinctions between productive capitals following from the nature of the various lines of industry.

Aside from the brutality with which the economist ordinarily handles distinctions of form, in which he is interested only so far as their material side is concerned, the vulgar economist is influenced by two other reasons in his violation of distinctions. There is, in the first place, his incapability to explain the peculiar nature of mercantile profit. In the second place, he writes for the apologetic purpose of proclaiming his opinion, that the process of production by its very nature, is the source of such forms as commodity-capital and money-capital, or later of merchants' capital and financial capital, instead of showing that they are due to the specific form of capitalist production, which is conditioned above all on the circulation of commodities and therefore of money.

If commercial capital and financial capital do not differ from the production of grain any more than this differs from stock raising and manufacture, then it is evident that production and capitalist production are one and the same thing, and that especially the distribution of the social products among the members of society for the purpose of productive or individual consumption need no more be promoted by merchants and bankers than the consumption of meat by stock raising or that of clothes by their manufacture.[46]

[46] Smart Mr. Roscher has figured out that, since certain people designate trade as a *mediation* between producers and consumers, "one" might just as well designate production itself as a *mediation* of consumption (between whom?), and this implies, of course, that the merchants' capital is as much a part of the productive capital as agricultural and industrial capital. In other words, because I can say, that man can *mediate* his consumption only by means of production (and he has to do this even without getting his education at Leipsic), or that labor is required for the appropriation of the products of nature (which might be called a *mediation*), it follows, that a *mediation* arising from a specific form of production — a real *mediation* — has the same absolute character and rank of a necessity. The word *mediation* settles everything. Moreover, the merchants are not mediators between producers and consumers (leaving out of consideration consumers which do not produce), but mediators of the exchange of products of

The great economists, such as Smith, Ricardo, etc., are embarrassed over mercantile capital as a special kind, since they analyse the basic form of capital, industrial capital, and take notice of capital of circulation (commodity-capital and money-capital) only to the extent that it is a phase in the process of reproduction of all capital. The rules concerning the formation of value, profit, etc., which are directly deduced from an analysis of industrial capital, do not fit merchants' capital directly. Therefore these economists leave merchants' capital entirely out of consideration and mention it only as a kind of industrial capital. Whenever they treat of it particularly, as Ricardo does in dealing with foreign commerce, they seek to demonstrate that it does not create any value (and consequently no surplus-value). But whatever is true of foreign commerce, applies also to home commerce.

Hitherto we have considered merchants' capital merely from the point of view of the capitalist mode of production, and within its limits. However, not only commerce, but also merchants' capital, is older than the capitalist mode of production. In fact, it represents historically the oldest free existence of capital.

As we have already seen that the money trade and the capital advanced for it require nothing for their existence but the presence of commerce on a large scale, and further of commercial capital, it is only the latter, which we have to consider here.

Since commercial capital is tied up in the circulation, and since its function consists exclusively in promoting the exchange of commodities, it follows that it requires no other condition for its existence — aside from undeveloped forms arising from direct barter — but those indispensable for the simple circulation of money and commodities. Or rather, the circulation of money is *the* condition of its existence. No matter what may be the basis on which production is carried on, which throws its products into circulation as commodi-

producers among themselves. They are but middle men in an exchange, which in a thousand cases takes place without them.

ties — whether it be the basis of a primitive commune, or of slave production, or of small agricultural, small bourgeois, or capitalist — the character of the products as commodities is not altered, and as commodities they have to pass through the process of exchange and through the forms incidental to it. The extremes, between which merchants' capital acts as a mediator, exist for it as given propositions, just as they do for money and its movements. The only requisite is that these extremes should be present as commodities, regardless of whether production is wholly a production of commodities, or whether only the surplus of the independent producers over the immediate needs satisfied by their production is thrown on the market. The merchants' capital promotes only the movements of these extremes, these commodities, which are premises of its own existence.

The extent to which production ministers to commerce and supplies the merchants, depends on the mode of production. It reaches its maximum under a fully developed capitalist production, in which the product is primarily produced as a commodity, not for direct subsistence. On the other hand, on the basis of every mode of production, commerce promotes the production of surplus products destined for exchange, for the purpose of increasing the enjoyments of wealth of the producers (who are here understood to be the owners of the products). Commerce impregnates production more and more with the character of a production for exchange.

The metamorphosis of commodities, their movements, consist, 1) materially, of an exchange of different commodities for one another; 2) formally, of a conversion of commodities into money by sale, and a conversion of money into commodities by purchase. And the functions of merchants' capital resolve themselves into these functions of buying and selling commodities. It promotes merely the exchange of commodities, which must be conceived at the outset as being something more than a bare exchange of commodities between direct producers. Under slavery, feudalism, vassalage, so far as primitive organisations are concerned, it is the slave holder, the feudal lord, the tribute collecting state, who are the owners

and sellers of the products. The merchant buys and sells for many. In his hands are concentrated purchases and sales, and purchase and sale cease consequently to be dependent on a direct necessity of the buyer (as a merchant).

But whatever may be the social organisation of the spheres of production, whose exchange of commodities the merchant promotes, his wealth exists always in the form of money and his money always serves as capital. Its form is always M — C — M′. Money, the independent form of exchange value, is his starting point, expansion of the exchange value his independent purpose. He occupies himself with the exchange of commodities and the operations incidental to it, which are separated from production and performed by a non-producer, and this is merely a means to increase wealth and at that wealth in its most general social form, exchange value. His compelling motive and compelling end are the conversion of M into M + ΔM. The transactions M — C and C — M, which promote the act M — M′, appear merely as stages of transition in this conversion of M into M + ΔM. This M — C — M′ is the characteristic movement of merchants' capital which distinguishes it from C — M — C, the exchange of commodities between the producers themselves, which has for its ultimate end the exchange of use-values.

To the extent that production is undeveloped, the money wealth will be concentrated in the hands of merchants, will appear in the specific form of merchants' wealth.

Within the capitalist mode of production — that is, as soon as capital has seized hold of production and given to it a wholly changed and specific form — merchants' capital appears merely as a capital with a *specific* function. But in all previous modes of production, and so much the more production ministers to the direct wants of the producers themselves, merchants' capital appears as the capital which performs *the* function of capital.

There is, then, no difficulty in understanding how it is that that merchants' capital is the historical form of capital long before capital has subjected production to its control. Its existence and development to a certain level are themselves

historical premises for the development of capitalist production. For they are, 1), premises for the concentration of moneyed wealth, and 2), the capitalist mode of production is conditioned on production for exchange, commerce on a large scale instead of with a few individual customers, and this requires also a merchant, who does not buy for the satisfaction of his own individual wants, but concentrates the transactions of many buyers in one commercial transaction. On the other hand, all development of merchants' capital tends to give to production more and more the character of a production for exchange and to impregnate the products more and more with the character of commodities. But the development of merchants' capital by itself is incapable of bringing about and explaining the transition from one mode of production to another, as we shall presently see.

Within capitalist production, the merchants' capital is reduced from its former independent existence to a special phase in the investment of capital in general, and the compensation of profits reduces its rate of profits to the general average. Then it serves only as an agent of productive capital. The particular social conditions, which formed together with the development of merchants' capital, are then no longer paramount. On the contrary, where merchants' capital still predominates, we find backward conditions. This is true even of one and the same country, in which, for instance, the pure merchants' towns form far better analogies with past conditions than the manufacturing towns.[47]

An independent and prevailing development of capital in the shape of merchants' capital signifies that production is not subject to capital, in other words, it means that capital devel-

[47] Mr. W. Kiesselbach (in his *Der Gang des Welthandels im Mittelalter*, 1860) is indeed still living in the conceptions of a world, in which the merchants' capital is *the* general form of capital. He has not the least inkling of the modern meaning of capital, any more than Mommsen has, when he speaks in his history of Rome of "capital" and "the rule of capital." In modern English history, the commercial estate proper and the merchant towns are also political reactionaries and in league with the landed and financial aristocracy against industrial capital. Compare, for instance, the political role of Liverpool as against Manchester and Birmingham. The complete rule of industrial capital was not acknowledged by English merchants' capital and moneyed interests until after the abolition of the duties on corn, etc.

ops on the basis of a mode of production independent and outside of it. The independent development of merchants' capital stands therefore in an inverse ratio to the general economic development of society.

The independent mercantile wealth, as a prevailing form of capital represents the independent establishment of the process of circulation as against its extremes, and these extremes are the exchanging producers themselves. These extremes remain independent of the process of circulation, just as this circulation remains independent of them. The product becomes a commodity in this case by way of commerce. It is commerce which, under such conditions, develops products into commodities; it is not the produced commodity itself which, by its movements, gives rise to commerce. Capital in the capacity of capital appears here first in the process of circulation. In the process of circulation money first develops into capital. In the circulation, the products first assume the character of exchange values, of commodities and money. Capital can and must form in the process of circulation, before it learns to control the extremes, that is, the various spheres of production between which circulation intervenes as a mediator. The circulation of money and commodities may act as an intermediary between spheres of production of widely different organisation, whose internal structure is still, predominantely adjusted to the production of use-values. This independent status of the process of circulation, by which various spheres of production are connected by means of a third link, expresses two facts. On the one hand it shows that the circulation has not yet seized hold of production, but as yet regards it as an existing fact. On the other hand, it shows that the process of production has not yet absorbed circulation and made a phase of production of it. But in capitalist production, both of these things are accomplished. The process of production rests wholly upon the circulation, and the circulation is a mere phase of transition of production, in which the product, having been created as a commodity, is realised in money and its elements of production replaced by products, which have likewise been created in the shape of commodities.

That form of capital, which developed directly in circulation, the merchants' capital, appears here merely as one of the forms of capital in its process of reproduction.

The rule, that the independent development of merchants' capital is inversely proportioned to the degree of development of capitalist production, becomes particularly manifest in the history of the carrying trade, for instance, among the Venetians, Genoese, Dutch, etc., where the principal gains were not made by the exportation of the products of the home industries, but by the promotion of the exchange of products of commercially and otherwise economically undeveloped societies and by the exploitation of both spheres of production.[48]

Here the merchants' capital is pure, separated from the extremes, the spheres of production, between which it intervenes. This is one of the main sources of its formation. But this monopoly of the carrying trade disintegrates, and with it this trade itself, in proportion as the economic development of peoples advances, whom it exploits at each end of its course, and whose backward development formed the basis of this trade. In the carrying trade, this appears not only as the disintegration of a special line of commerce, but also as the disintegration of the supremacy of purely commercial nations and of their commercial wealth in general, which rested upon this carrying trade. This is but one of the special forms, which expresses the subordination of the commercial capital to the industrial capital with the advance of capitalist production. The manner in which merchants' capital behaves wherever it rules over production is drastically illustrated, not only by the colonial economy (the colonial system) in general, but particularly by the methods of the old Dutch East India Company.

Since the movement of merchants' capital is M — C — M′,

[48] The inhabitants of merchant towns imported refined manufactured goods and expensive articles of luxury from rich countries, and thus offered incentives to the vanity of the large landowners, who eagerly bought these goods and paid large quantities of raw materials from their lands for them. Thus the commerce of a large part of Europe during this period consisted in an exchange of the raw materials of one country for the manufactured products of some industrially developed country. As soon as this taste became general and created a considerable demand, the merchants, in order to save the expenses of freight, began to establish similar manufactures in their own countries. (Adam Smith, Book III, chapter III.)

the profit of the merchant is made, in the first place, only within the process of circulation, by the two transactions of buying and selling; and in the second place, it is realised in the last transactions, the sale. It is a profit upon alienation. At first sight, a pure and independent commercial profit seems impossible, so long as products are sold at their value. To buy cheap in order to sell dear is the rule of trade. It is not supposed to be an exchange of equivalents. The conception of value is included in it only to the extent that the individual commodities all have a value and are to that extent money. In quality, they are all expressions of social labor. But they are not values of equal magnitude. The quantitative ratio, in which products are exchanged, is at first quite arbitrary. They assume the form of commodities inasmuch as they are exchangeable, that is, inasmuch as they may be expressed in terms of the same third thing. The continued exchange and the more regular reproduction for exchange reduces this arbitrariness more and more. But this applies not at once to the producer and consumer, but only to the mediator between them, the merchant, who compares the money-prices and pockets their difference. By his own movements he establishes the equivalence of commodities.

The merchants' capital is at first merely the intervening movement between extremes not controlled by it and between premises not created by it.

Just as from the mere form of the circulation of commodities, C — M — C, money rises not only as a measure of value and medium of circulation, but also as the absolute form of the commodity and thus of wealth, in the form of a hoard, so that its conservation and accumulation as money become its life's purpose, so money, in the shape of a hoard, issues from the mere form of the circulation of merchants' capital, M — C — M′, as something which is preserved and increased only by its alienation.

The trading nations of the ancients existed like the gods of Epicure in the intermediate worlds of the universe, or rather like the Jews in the pores of Polish society. The trade of the first independent and highly developed merchant towns and

trading nations rested as a pure carrying trade upon the barbarism of the producing nations between whom they intervened.

In the precapitalist stages of society, commerce rules industry. The reverse is true of modern society. Of course, commerce will have more or less of a reaction on the societies, between which it is carried on. It will subject production more and more to exchange value, by making enjoyments and subsistence more dependent on the sale than on the immediate use of the products. Thereby it dissolves all old conditions. It increases the circulation of money. It seizes no longer merely upon the surplus of production, but corrodes production itself more and more, making entire lines of production dependent upon it. However, this dissolving effect depends to a large degree on the nature of the producing society.

So long as merchants' capital promotes the exchange of products between undeveloped societies, commercial profit does not only assume the shape of outbargaining and cheating, but also arises largely from these methods. Leaving aside the fact that it exploits the difference in the prices of production of the various countries (and in this respect it tends to level and fix the values of commodities), those modes of production bring it about that merchants' capital appropriates to itself the overwhelming portion of the surplus-product, either in its capacity as a mediator between societies, which are as yet largely engaged in the production of use-values and for whose economic organisation the sale of that portion of its product which is transferred to the circulation, or any sale of products at their value, is of minor importance; or, because under those former modes of production, the principal owners of the surplus-product, with whom the merchant has to deal, are the slave holder, the feudal landlord, the state (for instance, the oriental despot), and they represent the wealth and luxury, which the merchant tries to trap, as Adam Smith correctly scented in that passage on feudal times, which I have quoted above. Merchants' capital in its supremacy everywhere stands for a system of robbery,[49] and its development, among the

[49] "Now there is among merchants much complaint about the nobles or robbers,

trading nations of old and new times, is always connected with plundering, piracy, snatching of slaves, conquest of colonies. See Carthage, Rome, and later Venetians, Portuguese, Dutch, etc.

The development of commerce and merchants' capital brings forth everywhere the tendency toward production of exchange values, increases its volume, multiplies and monopolises it, develops money into world money. Commerce therefore has everywhere more or less of a dissolving influence on the producing organisations, which it finds at hand and whose different forms are mainly carried on with a view to immediate use. To what extent it brings about a dissolution of the old mode of production, depends on its solidity and internal articulation. And to what this process of dissolution will lead, in other words, what new mode of production will take the place of the old, does not depend on commerce, but on the character of the old mode of production itself. In the antique world the effect of commerce and the development of merchants' capital always result in slave economy; or, according to what the point of departure may be, the result may simply turn out to be the transformation of a patriarchal slave system devoted

because they must trade under great danger and run the risk of being kidnapped, beaten, blackmailed, and robbed. If they suffered these things for the sake of justice, the merchants would be saintly people . . . But since such great wrong and unchristian thievery and robbery are committed all over the world by merchants, and even among themselves, is it any wonder that God should procure that such great wealth, gained by wrong, should again be lost or stolen, and they themselves hit over their heads or made prisoners? . . . And the princes should punish such unjust bargains with due rigor and take care that their subjects shall not be so outrageously abused by merchants. Because they don't do so, God employs knights and robbers, and punishes through them the merchants for the wrongs committed, and uses them as his devils, just as he plagues Egypt and all the world with devils, or persecutes with enemies. In the same way he beats one boy through another, without thereby insinuating that knights are any the less robbers than merchants, although the merchants daily rob the whole world, while a knight may rob one or two once or twice in a year." "Go by the word of Esau: Thy princes have become the companions of robbers. For they hang the thieves, who have stolen a gulden or a half gulden, but they associate with those, who rob all the world and steal with greater assurance than all others, that the proverb may remain true: Great thieves hang little thieves; and as the Roman senator Cato said: Mean thieves lie in prisons and stocks, but public thieves are clothed in gold and silks. But what will God say finally? He will do as he said to Ezekiel, he will amalgamate princes and merchants, one thief with another, like lead and iron, as when a city burns down, leaving neither princes nor merchants." (Martin Luther, *Bücher vom Kaufhandel und Wucher.* Vom Jahr, 1527.)

to the production of direct means of subsistence into a similar system devoted to the production of surplus-value. However, in the modern world, it results in the capitalist mode of production. From these facts it follows, that these results were conditioned on quite other circumstances than the mere influence of the development of merchants' capital.

It follows from the nature of the case that as soon as town industry as such separates from agricultural industry, its products are from the outset commodities and require for their sale the intervention of commerce. The leaning of commerce upon the development of the towns, and, on the other hand, the dependence of the towns upon commerce, are to that extent intelligible. However, in what measure industrial development will keep step with this development, depends upon quite other circumstances. Already ancient Rome, in its later republican days, developed merchants' capital more highly than it had ever existed in the antique world, without any progress in the development of crafts, while in Corinth and in other Grecian towns of Europe and Asia Minor the development of commerce was accompanied by highly developed crafts. On the other hand, in direct opposition to the development of towns and its conditions, the trading spirit and the development of commerce are frequently found among unsettled nomadic peoples.

There is no doubt — and it is precisely this fact which has led to many wrong conceptions — that in the 16th and 17th centuries the great revolutions, which took place in commerce with the through geographical discoveries and rapidly increased the development of merchants' capital, form one of the principal elements in the transition from feudal to capitalist production. The sudden expansion of the world market, the multiplication of the circulating commodities, the zeal displayed among the European nations in the race after the products of Asia and the treasures of America, the colonial system, materially contributed toward the destruction of the feudal barriers of production. However, the modern mode of production, in its first period, the manufacturing period, developed only in places, where the conditions for it had been

previously developed during medieval times. Compare, for instance, Holland with Portugal.[50] And, on the other hand, when in the 16th, and partially still in the 17th, century the sudden expansion of commerce and the creation of a new world market exerted an overwhelming influence on the overthrow of the old mode of production and the rise of the capitalistic one, this was accomplished on the basis of the already created capitalist mode of production. The world market forms itself the basis of this mode of production. On the other hand, the immanent necessity of this production to produce on an ever enlarged scale tends to extend the world market continually, so that it is not commerce in this case which revolutionises industry, but industry which continually revolutionises commerce. The commercial supremacy itself is now conditioned on the greater or smaller prevalence of the conditions for a large industry. Compare for instance, England and Holland. The history of the decline of Holland as the ruling commercial nation is the history of the subordination of merchants' capital to industrial capital. The obstacles presented by the internal solidity and articulation of precapitalistic, national, modes of production to the corrosive influence of commerce is strikingly shown in the intercourse of the English with India and China. The broad basis of the mode of production is here formed by the unity of small agriculture and domestic industry, to which is added in India the form of communes resting upon common ownership of the land, which, by the way, was likewise the original form in China. In India, the English exerted simultaneously their direct political and economic power as rulers and landlords, for the purpose of disrupting these small economic organisations.[51] The English commerce

[50] How overweening fishing, manufacture, and agriculture were as a basis in the development of Holland, aside from other circumstances, has already been explained by writers of the 18th century, for instance, by Massie. In contradistinction to the former view, which underrated the volume and importance of the commerce of Asia, of antiquity, and of the Middle Ages, it has now become the custom to overestimate it extraordinarily. The best remedy against this conception is a study of the imports and exports of England in the beginning of the 18th century and their comparison with modern imports and exports. And yet this 18th century commerce was incomparably greater than that of any former trading nation. (See Anderson, *History of Commerce.*)

[51] If any nation's history, then it is the history of the English management of

exerts a revolutionary influence on these organisations and tears them apart only to the extent that it destroys by the low prices of its goods the spinning and weaving industries, which are an archaic and integral part of this unity. And even so this work of dissolution is proceeding very slowly. It proceeds still more slowly in China, where it is not backed up by any direct political power on the part of the English. The great economy and saving in time resulting from the direct connection of agriculture and manufacture offer here the most dogged resistance to the products of great industries, whose prices are everywhere perforated by the dead expenses of their process of circulation. On the other hand, Russian commerce, unlike the English, leaves the economic basis of Asiatic production untouched.[52]

The transition from the feudal mode of production takes two roads. The producer becomes a merchant and capitalist, in contradistinction from agricultural natural economy and the guild-encircled handicrafts of medieval town industry. This is the really revolutionary way. Or, the merchant takes possession in a direct way of production. While this way serves historically as a mode of transition — instance the English clothier of the 17th century, who brings the weavers, although they remain independently at work, under his control by selling wool to them and buying cloth from them — nevertheless it cannot by itself do much for the overthrow of the old mode of production, but rather preserves it and uses it as its premise. For example, even up to the middle of the 19th century the manufacturer in the French silk industry and in the English hosiery and lace industries was but nominally a manufacturer, and merely a merchant in point of fact, who permitted the weavers to continue their work in the old un-

India which is a string of unsuccessful and really absurd (and in practice infamous) experiments in economics. In Bengal they created a caricature of English landed property on a large scale; in southeastern India a caricature of small allotment property; in the Northwest they transformed to the utmost of their ability the Indian commune with common ownership of the soil into a caricature of itself.

[52] Since Russia has begun making frantic exertions to develop its own capitalist production, which is exclusively dependent upon its home market and the neighboring Asiatic states, this is also gradually changing.— F. E.

organised way and exerted only the control of the merchant, for whom they work in reality.[53] This method is everywhere an obstacle to a real capitalist mode of production and declines with the development of the latter. Without revolutionising the mode of production, it deteriorates merely the condition of the direct producers, transforms them into mere wage workers and proletarians under worse conditions than those who have already been placed under the immediate control of capital and absorbs their surplus-labor on the basis of the old mode of production. The same conditions exist in a somewhat modified form in the London furniture industry, so far as it is carried on by handicrafts. Particularly in the Tower hamlets it is practised on a very extensive scale. The whole production is divided into numerous separate lines independent of one another. One business makes only chairs, another only tables, a third only bureaus, etc. But these lines of business themselves are run more or less like crafts, by one small master with a few journeymen. Nevertheless the output is too large to work directly for private persons. The products are bought by owners of furniture stores. On Saturdays the master sees them and sells his product, and the transaction is closed with as much haggling as is done in a pawnshop over the loan on this or that piece. The masters need this weekly sale, were it for no other reason than to buy more raw materials for next week and pay wages. Under these circumstances, they are really only middlemen between their employes and the merchants. The merchant is the real capitalist, who pockets the largest share of the surplus-value.[54]

A similar condition exists in the transition to manufacture from lines, which were formerly carried on as handicrafts or as sidelines to rural industries. According to the development

[53] The same is true of the ribbon and basting makers and silk weavers in the Rhine districts. Near Crefeld even a railroad has been built for the intercourse of these rural hand weavers with the "manufacturer" in the city, but has later been tied up, together with the handloom weavers themselves, by the mechanical weaving industry.— F. E.

[54] This system has been developed since 1865 on a still larger scale. Details concerning it are contained in the First Report of the Select Committee of the House of Lords on the Sweating System, London, 1888.— F. E.

of such small independent businesses — which may even employ machinery that admits of a craftslike operation — the transition to large scale industry takes place. The machine is driven by steam, instead of by hand. This is the case, for instance, of late in the English hosiery industry.

There is, consequently, a threefold transition. First, the merchant becomes directly an industrial capitalist. This is the case in crafts conditioned on commerce, especially industries producing luxuries, which are imported by the merchants together with the raw materials and laborers from foreign countries, as they were in Italy from Constantinople in the 15th century. In the second place, the merchant converts the small masters into his middlemen or, perhaps, buys direct from the self-producer, leaving him nominally independent and his mode of production unchanged. In the third place, the industrial becomes a merchant and produces immediately on a large scale for commerce.

In the Middle Ages, the merchant is merely the man who, as Poppe correctly says, "removes" the goods produced by the guilds or the peasants. The merchant becomes an industrial capitalist, or rather, he lets the craftsmen, particularly the small rural producers, work for him. On the other hand, the producer becomes a merchant. The master weaver, instead of receiving his wool in installments from the merchant and working for him with his journeymen buys wool or yarn himself and sells his cloth to the merchant. The elements of production pass into his process of production as commodities bought by himself. And instead of producing for the individual merchant, or for definite customers, the master cloth-weaver produces for the commercial world. The producer is himself a merchant. The merchants' capital performs no longer anything but the process of circulation. Originally the commerce was the premise for the transformation of the crafts, rural domestic industries, and feudal agriculture into capitalist enterprises. It develops the products into commodities, either by creating a market for them, or by carrying new equivalents in the form of goods to them and supplying production with new raw and auxiliary materials. In this way

it opens up new lines of production, which are based at the outset upon commerce, both as concerns the production for the home and world market and as concerns conditions of production originated by the world market. As soon as manufacture gains sufficient strength, and still more large scale industry, it creates in its turn a market for itself and captures it with its commodities. Now commerce becomes the servant of industrial production, and a continual expansion of the market becomes a vital necessity for industrial production. An ever more extended wholesale production floods the existing market and thereby works continually toward a still wider expansion of the market and a bursting of its bonds. What restricts this wholesale production, is not commerce (to the extent that it expresses the existing demand), but the magnitude of the employed capital and the developed productivity of labor. The industrial capitalist always has the world market before him, compares, and must continually compare, his own cost-prices with those of the whole world, not only with those of his home market. In former periods this comparison falls almost entirely upon the shoulders of the merchants, and thereby secures for merchants' capital the supremacy over industrial capital.

The first theoretical treatment of modern modes of production — the mercantile system — started out necessarily from the superficial phenomena of the process of circulation, which are presented in an independent form by the movements of merchants' capital. Therefore it grasped only the semblance of things. This was partly due to the fact that merchants' capital is the first free mode of existence of capital in general. On the other hand, it was due to the overwhelming influence exerted by this capital during the first period of revolution of feudal production, the period of genesis of modern production. The real science of modern economy does not begin, until theoretical analysis passes from the process of circulation to the process of production. It is true, interest-bearing capital is likewise a very old form of capital. But we shall see later, why mercantilism did not take its departure from it, but assumed a controversial attitude towards it.

PART V.

DIVISION OF PROFIT INTO INTEREST AND PROFITS OF ENTERPRISE. THE INTEREST-BEARING CAPITAL.

CHAPTER XXI.

THE INTEREST-BEARING CAPITAL.

In our first discussion of the general, or average, rate of profit in Part II of this volume, we did not have this rate before us in its complete form, since the equalisation of profit appeared there only as an equalisation between the various industrial capitals invested in different spheres. This was further supplemented in the preceding Part, in which the participation of merchants' capital in this equalisation and the commercial profit were discussed. By this means the general rate of profit and the average profit presented themselves within more circumscribed limits than before. In the further process of our analysis it should be remembered, that any future reference to the general rate of profit or to the average profit means only this latter, completed, form of the average rate. Since this rate is now the same for the industrial and the mercantile capital, it is no longer necessary, so far as this average profit is concerned, to make any distinction between industrial and commercial profit. Whether capital is invested industrially in the sphere of production, or commercially in the sphere of circulation, it yields the same average profit annually in proportion to its magnitude.

Money — which signifies here any independent expression of a certain amount of value, whether it exists actually as

money or as commodities — may be converted into capital on the basis of capitalist production. By this conversion it is transformed from a given value to a self-expanding, increasing, value. It produces a profit, that is, it enables a capitalist to extract a certain amount of unpaid labor, surplus-products and surplus-value, from the laborers and to appropriate it to himself. In this way it acquires, aside from its use-value as money, an additionel use-value, namely that of serving as capital. Its use-value consists then precisely in the profit, which it produces when converted into capital. In this capacity of potential capital, of a means for the production of profit, it becomes a commodity, but a commodity of a peculiar kind. Or, what amounts to the same, capital as capital becomes a commodity.[55]

Take it that the average rate of profit is 20%. In that case a machine, valued at 100 p.st., employed as capital under the prevailing average conditions and with an average exertion of intelligence and adequate activity, would yield a profit of 20 p.st. In other words, a man having 100 p.st. at his disposal, holds in his hand a power by which 100 p.st. may be turned into 120 p.st., or by which a profit of 20% may be produced. He holds in his hand a potential capital of 100 p.st. If this man relinquishes these 100 p.st. for one year to another man, who uses this sum actually as capital, he gives him the power to produce a profit of 20%, a surplus-value, which costs this other nothing, for which he pays no equivalent. If this man should pay, say 5 p.st. at the close of the year to the owner of the 100 p.st., out of the produced profit, he would be paying for the use-value of the 100 p.st., the use-value of its function as capital, the function of producing 20 p.st. of profit. That part of the profit, which he pays to the owner, is called interest. It is merely another name, a special term, for a certain part of the profit, which capital in process of its function has to give up to its owner, instead of keeping it in its own pockets.

[55] At this place, some passages should be quoted, in which the economists conceive the matter in this way. "You (the Bank of England) are very large dealers in the *commodity capital?*" is a question presented to a director of this bank on the witness stand. (See *Report on Bank Acts, H. of C.*, 1857.)

It is evident, that the possession of 100 p.st. gives to their owner the power to absorb the interest, a certain portion of the profit produced by his capital. If he did not give the 100 p.st. to the other man, then this other could not produce any profit, and could not act in the capacity of capitalist at all with reference to these 100 p.st.[56]

To speak in such a case of natural justice, as Gilbart is doing (see note), is nonsense. The justice of the transactions between the agents of production rests on the fact that these transactions arise as natural consequences from the conditions of production. The juristic forms, in which these economic transactions appear as activities of the will of the parties concerned, as expressions of their common will and as contracts which may be enforced by law against some individual party, cannot determine their content, since they are only forms. They merely express this content. This content is just, whenever it corresponds, and is adequate, to the mode of production. It is unjust, whenever it contradicts that mode. Slavery on the basis of capitalist production is unjust; likewise fraud in the quality of commodities.

The 100 p.st. produce the profit of 20 p.st. by functioning as capital, whether it be industrial or commercial. But the indispensable condition of this function as capital is that this money is used as capital, that this money is invested in the purchase of means of production (in the case of industrial capital), or of commodities (in the case of merchants' capital). But in order to be expended, it must be there. If A, the owner of the 100 p.st., were to spend them for his private expenses, or to keep them as a hoard, they could not be invested by B, in his capacity as a capitalist, as capital. B does not invest his own capital, but that of A. But he cannot expend the capital of A without the consent of A. Therefore it is really A, who first expends these 100 p.st. as capital, although his whole function as a capitalist is limited to this expenditure of 100 p.st. as capital. So far

[56] "That a man, who borrows money with the intention of making a profit on it, should give a portion of the profit to the lender, is a self-understood principle of natural justice." (Gilbart, *The History and Principles of Banking*, London, 1834, p. 163.)

as these 100 p.st. are concerned, B acts in the capacity of a capitalist only because A lends him this money and thus expends it as capital.

Let us first consider the peculiar circulation of interest-bearing capital. Then we shall analyse in the second place the peculiar manner, in which it is sold as a commodity, being merely lent instead of relinquished for good.

The point of departure is the money, which A advances to B. This may be done with or without security. However, the first named form is the more ancient, with the exception of advances on commodities or on certificates of indebtedness, such as bills of exchange, bonds, etc. These special forms do not concern us here. We are dealing here with interest-bearing capital in its ordinary form.

In the hand of B, the money is actually converted into capital, passes through the process M — C — M′, and returns as M′ to A, as M + increment of M, where the increment of M represents the interest. For the sake of simplicity we leave out of consideration the case, in which capital stays in the hands of B for a long term and interest is paid at periodical intervals.

The movement, then, is M — M — C — M′ — M′. What appears duplicated here is 1) the expenditure of the money as capital, 2) its reflux as realised capital, as M′, or as M + increment of M.

In the movement of merchants' capital, M — C — M′, the same commodity changes hands twice, or even more than twice, if one merchant sells to another. But every change of hand of these commodities indicates a metamorphosis, a purchase or sale of commodities, no matter how often this process may be repeated until it ends in consumption.

On the other hand, the same money changes hands twice in C — M — C, but this indicates the complete metamorphosis of the commodity, which is first converted into money and then from money back into another commodity.

But in the case of interest-bearing capital, the first change of hands of M is not a phase of either the metamorphosis of a commodity or of the reproduction of capital. It does

not become so until the second change of hands, in the hands of the man acting in the capacity of a capitalist, who carries on a trade with it or transforms it into productive capital. The first change of hands of M does not express anything else in this case but its transfer, or handing over by contract, from A to B. This is a transfer, which usually takes place under certain juristic forms and stipulations.

This duplicated expenditure of money as capital, the first of which is merely a transfer from A to B, is supplemented by the duplication of its reflux. As M′, or M + increment of M, it flows back out of the process to the man acting in the capacity of a capitalist. This man in his turn transfers it back to A, together with a part of the profit, of realised capital, of M + increment of M, which, however, is not equal to the entire profit, but only a part of the profit, the interest. It flows back to B only as the thing which he had invested, as capital in process of function, but as the property of A. In order that its reflux may be complete, B must return it to A. But B has not only to return the amount of the capital, he must also turn over to A a part of the profit, which he made with this capital, and this part is called interest. For A gave him this money only as a capital, that is, as a value, which is not only maintained by its movements, but brings also a surplus-value to its owner. It remains in the hands of B only so long as it is performing its function of capital. And it ceases to be capital as soon as it is returned to its owner on the stipulated date. When no longer serving as capital, it must be returned to A, who never ceased being its legal owner.

The form of lending, which is peculiar to this commodity, this capital as a commodity, and which also occurs in other transactions instead of that of sale, follows from the simple definition that capital serves here as a commodity, or that money as capital becomes a commodity.

It is necessary to make a distinction here.

We have seen in Volume II, chapter I, and recall at this point, that capital serves in the process of circulation as commodity-capital and money-capital. But in neither of

these forms does capital become a commodity as capital.

As soon as the productive capital has transformed itself into commodity-capital, it must be thrown upon the market, it must be sold as a commodity. There it serves simply in the capacity of a commodity. The capitalist then appears only as a seller of commodities, just as the buyer is only a buyer of commodities. As a commodity, the product must realise its value in the process of circulation, by its sale, must assume the form of money. In this respect it is quite immaterial, whether this commodity is bought by a consumer for the purpose of subsistence, or by a capitalist as a means of production to become a part of his capital. In the act of circulation, the commodity-capital serves only as a commodity, not as capital. It is a commodity-*capital,* as distinguished from a simple commodity, 1), because it is pregnant with surplus-value, so that the realisation of its value is simultaneously a realisation of surplus-value. But this does not alter in any way its simple existence as a commodity, as a product of a certain price. 2) It is a commodity-*capital,* because its function as a commodity is a phase in its process of reproduction as capital, so that its movement as a commodity, being a part of its movement in process, is simultaneously its movement as capital. Yet it does not become capital by the act of selling as such, but only through the connection of this act with the whole movement of this definite amount of value in the capacity of capital.

In like manner it serves only as money pure and simple, when acting in the capacity of money-capital, that is, as a means of buying commodities (the elements of production). The fact that this money is at the same time money-capital, a form of capital, is not due to the act of buying, which is the service performed by it as money. It is due to the connection of this act with the total movement of capital, since this act, which it performs as money, inaugurates the capitalist process of production.

But so far as they perform any service and play any actual role in the process, commodity-capital on the market serves only as a commodity, money-capital only as money. At no

time during the metamorphosis, viewed by itself, does the capitalist sell his commodities as capital to the buyer, although they represent a capital for himself, nor does he give up money to the sellers in his capacity as a capitalist. In either case he exchanges his commodities simply as commodities, and the money simply as money, as a means of purchasing commodities.

It is only in the connection with the whole process, at the moment where the point of departure appears simultaneously as the point of return, in M — M′ or C — C′, that capital in the process of circulation appears as capital (while it appears as capital in the process of production through the subordination of the laborer under the capitalist and the production of surplus-value). In this moment of return, however, the connection disappears. What is present is M′, that is money plus increment of money (regardless of whether the amount of value increased by this increment has the form of money, commodities, or elements of production), a certain amount of money equal to the amount originally advanced plus an increment, which is the realised surplus-value. And it is precisely at this point of return, where capital exists as a realised capital, as an expanded value, that capital never passes into circulation — considering this point as a fixed point of rest, whether imaginary or real — , but rather appears to be withdrawn from circulation as a result of the whole process. Whenever it is again relinquished, it is never transferred to another as *capital,* but sold to him as a simple commodity, or given to him as simple money in exchange for commodities. It never appears as capital in its process of circulation, but only as a commodity or as money, and this is the only form in which it exists so far as others are concerned. Commodities and money are here capital, not inasmuch as commodities change into money, or money into commodities, not with reference to their actual relations to sellers or buyers, but only with reference to their ideal relations, that is, subjectively speaking, their relations to the capitalist himself, or objectively speaking, as elements of the process of reproduction. So far as capital is capital,

it exists only in its actual function, not in the process of circulation, but only in the process of production, in the process by which labor-power is exploited.

But it is different with interest-bearing capital, and it is precisely this difference, which constitutes its specific character. The owner of money, who desires to invest his money as interest-bearing capital, transfers it to some one else, throws it into circulation, makes a commodity of it *as capital*. It is not a capital for himself alone, but also for others. It is not capital merely for the man who offers it for investment, but it is handed to others at the outset as capital, as a value endowed with the use-value of creating surplus-value, profit; a value which preserves itself in process and returns to its original owner, in this case the owner of money, after performing its function. It moves away from him only for a certain time, it passes for a while from the possession of its owner into that of a capitalist performing his business, it is neither given up in payment nor sold, but merely loaned. It is relinquished only with the understanding that it shall in the first place return to its point of departure after a certain time, and that it shall return, in the second place, as realised capital, a capital having actually performed its function of creating surplus-value.

Commodities, which are loaned out as capital, are loaned either as fixed or as circulating capital, according to their constitution. Money may be loaned in either form. For instance, it may be loaned as fixed capital in the form of an annuity, whereby a portion of the capital returns with the interest. Some commodities, owing to the nature of their use-values, can be loaned only as fixed capital, such as houses, ships, machines, etc. But all loan capital, whatever be its forms, and no matter in what manner the nature of its use-value may modify its return, is only a specific form of money-capital. For the thing that is loaned here is always a definite sum of money, and it is this sum on which interest is calculated. If the thing that is loaned is neither money nor circulating capital, it is paid back in the same way in which fixed capital returns. The lender receives periodically

a certain interest and a portion of the consumed value of the fixed capital itself, an equivalent for the periodical wear and tear. And at the end of the stipulated term the unconsumed portion of the loaned fixed capital is returned *in natura*. If the loaned capital is circulating capital, it is likewise returned in the manner peculiar to circulating capital.

The manner of reflux, then, is always determined by the actual circulation of the capital in process of reproduction and its specific kind. But so far as loan capital is concerned, its reflux assumes the form of return payments, because its advance, by which it is relinquished, has the form of loaning.

In this chapter we treat only of money-capital proper, from which the other forms of loaned capital are derived.

The loaned capital returns in a twofold way. First it returns in the process of reproduction to the capitalist performing his function, and then its return is duplicated by its transfer to the lender, the money-capitalist, in the form of a return payment to its real owner, its legal point of departure.

In the actual process of circulation the capital appears always as a commodity or as money, and its movements are always dissolved into a series of purchases and sales. In short, the process of circulation resolves itself into the metamorphosis of commodities. It is different, when we consider the process of reproduction as a whole. If we take our departure from money (and it is the same, when we start off with commodities, since we then take our departure from their value and look upon them from the point of view of money), we see that a certain sum of money is expended and returns after a certain period with an increment. This sum has preserved itself and expanded itself in the course of a certain rotation. To the extent that money is loaned as capital, it is loaned as just such a sum of money, which preserves and expands itself, returns after a certain period with an increment, and is ready to pass through the same process once more. It is not expended either as money or as a commodity, it is neither exchanged for commodities when advanced in the form of money, nor sold in exchange for money, when

advanced in the form of commodities. It is expended as capital. This reflexive relation to itself, in which capital presents itself when the process of production is viewed in its entirety and as a unit, and in which money appears as self-increasing money, is here imposed upon it as its character and peculiarity without the intervention of any intermediary movement. And it is expended in this peculiar form, when it is loaned as money-capital.

A very queer conception of the role of money-capital is held by Proudhon "*Gratuité du Crédit.* Discussion enter M. F. Bastiate et M. Proudhon. Paris, 1850.") Loaning appears as an evil to Proudhon because it is not selling. Loaning at interest is for him "the faculty of always selling the same article over and over, and of receiving its price again and again, without ever relinquishing the ownership of the things one is selling" (page 9). The object, such as money, a house, etc., does not change owners, as it does in selling and buying. But Proudhon does not see, that no equivalent is received for money handed over as interest-bearing capital. It is true that objects are passed from one to another in every act of buying and selling, so far as they are at all processes of exchange. The ownership of the sold object is always relinquished. But its value is not given up. In selling the commodity is relinquished, but not its value, which is given in return in the form of money, or in another form which here takes the place of money, namely of certificates of indebtedness, or of titles of payment. In buying money is given away, but its value, which is recovered in the shape of commodities. The industrial capitalist holds the same value in his hands during the entire process of reproduction (except the surplus-value), only it assumes different forms.

To the extent that exchange takes place, that is, an exchange of objects, no change of value takes place. The same capitalist always holds the same value in his hands. But so long as surplus-value is produced by the capitalist, no exchange takes place. As soon as exchange takes place, the surplus-value is already incorporated in the commodities. If we do not have in mind the individual acts of exchange, but

the total circulation of capital, M — C —M′, we see that a definite amount of values is continually advanced, and that this amount plus the surplus-value, or the profit, is recovered from the circulation. It is true, the individual acts of exchange do not reveal the fact that they are promoting this process. And it is precisely this process of M as capital, on which the interest of the money-lending capitalist rests and from which it arises.

"In fact," says Proudhon, "the hat maker, who sells hats . . . receives their value, no more and no less. But the money-lending capitalist . . . does not recover merely his capital: he recovers more than his capital, more than he throws into circulation; he receives an interest over and above his capital." (Page 169.) The hatter stands here in the place of the productive capitalist as distinguished from a loan capitalist. Evidently Proudhon did not learn the secret, which enables the capitalist to sell commodities at their value (the equalisation of values by the prices of production is here immaterial for his conception), whereby he receives a profit in addition to the capital, which he throws into circulation. Let us assume that the price of production of 100 hats is 115 pounds sterling, and that this price of production happens to be identical with the value of the hats, which means that the capital invested in the production of hats is of the same composition as the average social capital. If the profit is 15 p.st., or 15%, then the hatter gets this profit of 15 p.st. by selling his hats at their value of 115. They cost him 100 p.st. If he has produced them with his own capital, he pockets the whole surplus of 15 p.st. If he has borrowed the capital, he may have to give up 5 p.st. for interest. This does not alter anything in the value of the hats, but only in the distribution of the surplus-value already contained in this value between different persons. Since the value of the hats is not affected by the payment of interest, it is nonsense on the part of Proudhon to say: "As in commerce the interest of capital is added to the wages of laborers in making up the price of commodities, it is impossible that the laborer should be able to buy back the product of his own labor. To live by work-

ing is a principle, which implies a contradiction under the rule of interest." [57]

How little Proudhon understood the nature of capital, is shown by the following statement, in which he describes the movement of capital in general as a movement peculiar to interest-bearing capital: "Since money-capital, from exchange to exchange, comes always back to its source by the accumulation of interest, it follows that re-investment is always made by the same hand and profit accrues always to the same person."

What is it, now, that remains a riddle to him in the peculiar movement of interest-bearing capital? The categories buying, price, giving up objects, and the spontaneous form, in which surplus-value appears here; in short, the phenomenon that capital as such has become a commodity, so that selling has been turned into lending and price into a share in the profit.

The return of capital to its point of departure is the most general and characteristic movement of capital in its total circulation. This is by no means a peculiarity of interest-bearing capital. Its peculiarity is rather the externalised form of its return without the intervention of any circulation. The loaning capitalist lets go of his capital, transfers it to some industrial capitalist, without receiving any equivalent. His handing over of capital is not an act of the real circulation of capital at all, but serves merely as a prelude for the industrial capitalist who effects this circulation. This first change of place of money does not express any act of metamorphosis, neither buying nor selling. Its ownership is not relinquished, because no exchange takes place, no equivalent is offered. The return of the money from the hand of the industrial capitalist to that of the loaning capitalist supplements

[57] "A house," "money," etc., are not to be loaned as "capital," if Proudhon can have his way, but to be sold as "commodities . . . at cost-price" (page 44). Luther stood somewhat higher than Proudhon. He knew at least that the making of profits does not depend on the manner of lending or buying: "They turn buying also into usury. But this is really too much for one bite. We must first confine ourselves to one thing, usury in lending, and after we shall have stopped that (after judgment day), we will not fail to preach against usury in buying." (Martin Luther. *An die Pfarherrn wider den Wucher zu predigen.* Wittenberg, 1525.)

merely the first act of handing over the capital. This capital, after having been advanced in the form of money, returns to the industrial capitalist from the process of circulation in the form of money. But as the capital did not belong to him when he expended it, neither can it belong to him on its return. The passage through the process of reproduction cannot by any means give him the ownership of this capital. Hence he must restore it to its lender. The first transfer of the capital from the hands of the lender to those of the borrower is a legal transaction, which has nothing to do with the actual process of reproduction, but merely inaugurates it. The restoration, which transfers the returned capital from the hands of the borrower back to those of the lender is another legal transaction, a supplement of the first. The first inaugurates the actual process, the second takes place after this process. The point of departure and of return, the dispensation and recovery of the loaned capital, thus appear as arbitrary movements promoted by legal transactions, which take place before and after the actual process of capital and have nothing to do with it. So far as this actual process is concerned, the industrial capitalist might as well own the capital at the outset, so that it would return to him as his property.

In the first introductory act the lender gives his capital to the borrower. In the second and closing act after the process, the borrower returns the capital to the lender. To the extent that we consider merely the transaction between these two — and leaving aside the question of interest for the present —, in other words to the extent that we have in mind only the movement of the loan capital itself between the lender and the borrower, the whole movement is comprised within these two acts (separated by a longer or shorter time, during which the process of actual reproduction of capital takes place). And this movement, this dispensing on condition of returning, constitutes *per se* the movement of lending and borrowing, which is a specific form of a conditional dispensation of money or commodities.

The characteristic movement of capital in general, namely

the return of money to the capitalist, the return of capital to its point of departure, assumes in the case of interest-bearing capital a wholly externalised form, separated from the actual movement of which it is an expression. A lets go of his money, not in the sense of money, but of capital. This implies no transformation of the capital. It merely changes hands. Its real transformation into capital is not performed until it is in the hands of B. But it has become capital for A as soon as he has given it to B. The actual reflux of capital from the processes of production and circulation takes place only for B. But for A the reflux assumes the same form as the dispensation. The capital returns from the hands of B to those of A. Dispensing, loaning money for a certain time and recovering it with interest (surplus-value) make up the complete form of the movement, which is peculiar to interest-bearing capital as such. The actual movement of the loaned money as capital constitutes a process, which is outside of the transactions between the lender and the borrower. In these transactions the intermediate process is obliterated, invisible, not directly comprised.

Being a peculiar sort of commodity, capital has its own peculiar mode of alienation. Its return in the present case is not the expression, not the consequence or result, of a definite series of economic processes, but the outcome of a specific legal agreement between buyer and seller. The time of return depends on the duration of the process of reproduction. But in the case of interest-bearing capital, its return as capital *seems* to depend on the mere agreement between lender and borrower. The return of capital as a part of this agreement no longer appears as a result due to the process of reproduction, but seems to take place without depriving the loaned capital of the form of money. It is true that these transactions are actually determined by the reproductive returns. But this is not evident in the transactions themselves. Nor is it always the case in practice. If the return in reproduction does not take place at the proper time, then the borrower has to face the problem, what other resources he can

call into play to fulfill his obligations towards the lender. The mere *form* of this capital — that is, money expended as a certain sum, A, and returning as another sum $A + \frac{1A}{x}$, after a certain lapse of time, without any other intermediate connection but this lapse of time — is but an abstract image of the actual movement of capital.

In the actual movement of capital, its return is a phase of the process of circulation. The money is first converted into means of production; the process of production transforms it into commodities; by the sale of the commodities it is reconverted into money, and in this form it returns to the hands of the capitalist, who originally advanced the capital in the form of money. But in the case of interest-bearing capital, both the alienation and the return are the results of a legal transaction between the owner of capital and another person. We see only the alienation and the return. Whatever passes during the interval is obliterated.

But since money, when advanced as capital, has the faculty of returning to the person, who expended it as capital, since M — C — M′ is the immanent form of the movement of capital, for this very reason the owner of money can loan it as capital, a thing having the faculty of returning to its point of departure, of preserving its value while under way in process, and of increasing it. He loans it as capital, because it returns to its point of departure after having been transformed into capital, so that the borrower can restore it to the lender after a certain period, because he has recovered it himself.

The loaning of money as capital — its alienation on condition that it be returned after a certain time — is therefore conditioned on the requirement that this money be actually employed as capital, so that it may actually flow back to its starting point. The actual cycle of money as capital is therefore the basic condition of the legal transaction, by which the borrower has to return the money to the lender. If the borrower does not invest the money as capital, it is his own business. The lender loans it as capital, and as such it is

supposed to perform the capitalist functions, which include the circulation of money-capital until it reaches once more its starting point in the form of money.

The transactions M — C and C — M′ in the circulation, in which a certain amount of value serves as money or commodities, are but intermediary processes, individual phases of a whole movement. As capital, this sum passes through the whole movement M — M′. It is advanced as money, or as a sum of values in some form, and returns as a sum of values. The lender of money does not expend it in the purchase of commodities, or, if this sum of values exists in the form of commodities, he does not sell it for money, but he advances it as capital, as M — M′, as a value, which returns after a certain lapse of time to its point of departure. Instead of buying and selling, he loans. This loaning, then, is the form corresponding to its alienation as *capital,* instead of its alienation as money or commodities. This does not mean, however, that loaning may not be used in transactions, which have nothing to do with the capitalist process of reproduction.

We have so far considered only the movements of loaned *capital* between its owner and the industrial capitalist. Now we shall have to inquire into *interest.*

The lender expends his money as capital; the amount of values, which he relinquishes into the hands of another, is capital and returns to him. But the mere return of the loan capital into his hands as the same amount would not be its reflux as capital, but merely the return of a loaned sum of values. In order to return as capital, the advanced sum of values must not only be preserved in process, but must also be expanded, must return with a surplus-value, must be recovered as M + increment of M. This increment of M is in the present case the interest. It is that portion of the average profit, which does not remain in the hands of the practicing capitalist, but falls to the share of the money capitalist.

The fact that the money capitalist expends it as capital implies that it must be restored to him as M + increment of M. Later we shall also have to consider the case, in which interest is paid in fixed intervals without the simultaneous return of the capital, whose definite return does not take place until at the end of a longer period.

What is it that the money capitalist gives to the borrower, the industrial capitalist? What does he really pass over to him? It is only this transaction of handing over money which makes of the loaning of money a lending of money as capital, that is, the lending of capital as a commodity.

It is only by this act of passing money over to another that the capital is loaned by the money lender as a commodity, or that the commodity at his disposal is given to another as capital.

What is it that is alienated in ordinary sale? It is not the value of the sold commodities, for this changes merely its form. The value exists ideally in a commodity as its price, before it passes actually into the hands of the seller as money. The same value and the same amount of value merely change their form in such a case. In one instance they exist in the form of a commodity, in another in the form of money. The thing which is actually alienated by the seller, and which for this reason passes into the individual or productive consumption of the buyer, is the use-value of the commodity, is the commodity as a use-value.

What, then, is the use-value, which the money capitalist passes over for the period of the loan and relinquishes into the hands of the borrower, the productive capitalist? It is the use-value, which the money assumes by being capable of being invested as capital and performing the functions of capital, so that it can create a definite surplus-value, the average profit (any excess or fall below this is here a matter of accident), during its process, in addition to preserving its original magnitude of value. In the case of other commodities the use-value is ultimately consumed. Their substance disappears in consequence and with it their value. But the com-

modity capital has the peculiarity, that the consumption of its use-value not only preserves its exchange value and its use-value, but also increases them.

It is this use-value of money as capital, this faculty of producing an average profit, which the money capitalist relinquishes to the industrial capitalist for the period, during which he yields to the latter the use of the loan capital.

The money thus loaned shows in this respect a certain analogy with labor-power in its relation to the industrial capitalist. There is only this difference, that he pays for the value of labor-power, while he simply pays back the value of the loaned capital. The use-value of labor-power consists for the industrial capitalist in the faculty that labor-power creates more value (the profit) by its consumption for the industrial capitalist. And in like manner the use-value of the loan capital appears as its faculty of preserving and increasing value.

The money-capitalist alienates indeed a use-value, and for this reason the thing which he gives away is given as a commodity. And to this extent the analogy with a commodity is complete. In the first place, it is a value, which passes from one hand to another. In the case of a simple commodity, a commodity as such, the same value remains in the hands of the buyer and seller, only it has different forms; both have the same value which they had before the transaction, the one in the form of a commodity, the other in that of money. The difference in the case of loan capital is that the money capitalist is the only one who gives away a value when loaning money; but he preserves it by means of future restoration. In the transaction of loaning only one party receives value, since only one party relinquishes value.

In the second place, it is a real use-value, which is relinquished on one side and received and consumed on the other. But it differs from the use-value of ordinary commodities in that it is itself a value, namely the excess over the value of the original capital realised by the use of money as capital. The profit is this use-value.

The use-value of the loan capital consists in being able

to serve as capital and to produce in this capacity the average profit under average conditions.[58]

What, then, does the industrial capitalist pay, and what is, therefore, the price of the loaned capital? That which men pay as interest for the use of what they borrow is, according to Massie, a part of the profit it is capable of producing.[59]

What the buyer of an ordinary commodity buys is its use-value; what he pays for is its exchange value. What the borrower of money buys, is likewise its use-value as capital; but what does he pay for? Surely not for its price, or value, as in the case of ordinary commodities. No change of form takes place in the value passing between the borrower and the lender, such as takes place between the buyer and the seller, so that this value would exist in one instance in the form of money, in another instance in the form of a commodity. The sameness of the alienated and returned value shows itself here in an entirely different way. The sum of values, the money, is given away without an equivalent, and is returned after the lapse of a certain period. The lender always remains the owner of the same value, even after it has passed from his hands into those of the borrower. In the simple exchange of commodities, the money is always on the side of the buyer; but in the lending, the money is on the side of the lender. It is he, who gives away his money for a certain period, and it is the borrower, the buyer of capital, who receives it as a commodity. But this is possible only when the money serves as capital and is advanced for this purpose. The borrower borrows money as capital, as a value producing an increment. But at the moment of borrowing it is as yet only potential capital, and so is any other capital at the moment when it is advanced. Only by its use does it expand

[58] The equitableness of taking interest depends not upon a man's making or not making profit, but upon its being capable of producing profit, if rightly employed. (*An Essay on the Governing Causes of the Natural Rate of Interest*, wherein the sentiments of Sir W. Petty and Mr. Locke, on that head, are considered. London, 1750. P. 49.) The author of this anonymous work is J. Massie.

[59] Rich people, instead of employing their money themselves . . . let it out to other people for them to make profit of, reserving for the owners a proportion of the profits so made. (L. c., p. 23.)

its value and realise itself as capital. But after it has become realised capital, the borrower has to return it, as a value plus a surplus-value (interest). And this interest can be only a portion of the realised profit. Only a portion, not the whole of it. For its use-value for the borrower consists in producing a profit for him. Otherwise there would not have been any alienation of its use-value on the part of the lender. On the other hand, it cannot be the whole profit which falls to the share of the borrower. Otherwise he would not be paying anything for the alienation of the use-value, and he would return the advanced money to the lender as simple money, not as a capital having realised itself. For it is realised capital only when it is M + increment of M.

Both of them expend the same sum of money as capital, the lender and the borrower. But only in the hands of the latter does it serve as capital. The profit is doubled by the double existence of the same sum of money as a capital for two persons. It can serve as a capital for both of them only by dividing the profit. That portion, which falls to the share of the lender, is called interest.

It is our assumption, that this entire transaction takes place between two kinds of capitalists, the money-capitalist and the industrial or the merchant capitalist.

It should never be forgotten, that capital as such is here a commodity, or that the commodity, which is here in question, is capital. All the relations, which become manifest here, would be irrational from the point of view of a simple commodity, or even from the point of view of capital serving as a commodity-capital in its process of reproduction. Lending and borrowing, instead of selling and buying, is here a distinction arising from the specific nature of the commodity, of capital; also that it is interest, not the price of the commodity, which is paid here. If interest is to be called the price of money-capital, it will be an irrational form of price, which is quite at variance with the conception of the price of commodities.[60] The price is then reduced to its purely

[60] "The expression 'value' applied to currency has three meanings . . . secondly, currency actually in hand, compared with the same amount of currency,

abstract and meaningless form, signifying a certain sum of money paid for some thing, which serves in some manner as a use-value. On the other hand, the concept of price really signifies the value of some use-value expressed in money.

To call interest the price of capital is to use at the outset an irrational expression. A commodity has here a double value, namely first a real value, and secondly a price differing from this value, while ordinarily price signifies the expression of the value in money. Money-capital is primarily but a sum of money, or the value of a certain quantity of commodities incorporated in a sum of money. If a commodity is loaned as capital, then it is only the disguised form of a sum of money. For that which is loaned as capital is not so and so many pounds of cotton, but so much money existing in the form of cotton as its value. The price of capital, therefore, refers to it as a sum of money, even if not a currency, as Mr. Torrens thinks (see above note 60). How, then, can a sum of values have a price beside its own price, that is, aside from the price expressed in their own money-form? Price is precisely the value of commodities (and this holds good also of the market-price, whose difference from value is not one of quality, but only one of quantity, since it refers only to the magnitude of the value) as distinguished from their use-value. A price which is different in quality from value is an absurd contradiction.[61]

Capital manifests itself as capital by its employment. The degree of its self-expansion expresses the quantitative ratio, in which it realises itself as capital. The surplus-value or profit produced by it — its rate or magnitude — is measurable only by its comparison with the value of the advanced capital. The greater or lesser self-expansion of interest-

which will come in at some later day. Then its value is measured by the rate of interest, and the rate of interest determined by the ratio between the amount of loanable capital and the demand for it." (Colonel R. Torrens: *On the Operation of the Bank Charter Act of* 1844, etc., 2nd. ed., 1847.)

[61] "The ambiguity of the term 'value of money' or 'of the currency,' when employed indiscriminately as it is, to signify both value in exchange for commodities and value in use of capital, is a constant source of confusion." (Tooke: *Inquiry into the Currency Principle*, p. 77.) The main confusion (implied by the question itself) that value as such (interest) should be considered as the use-value of capital, has escaped Tooke.

bearing capital is, therefore, only measurable by a comparison of the amount of interest, its share in the total profits, with the value of the advanced capital. While the price expresses the value of commodities, the interest expresses the self-expansion of money-capital and thus appears as the price, which the lender receives for it. This shows how absurd it is at the start to apply indiscriminately to this question the simple relations of exchange through buying and selling, as Proudhon does. For the basic premise is here that money serves as capital and may thus be transferred as capital itself, as potential capital, to another person.

Capital itself appears here as a commodity, inasmuch as it is offered on the market as the use-value of money actually handed over as capital. Its use-value consists in producing profits. The value of money or of commodities employed in the capacity of capital is not determined by their value as money or commodities, but by the quantity of surplus-value, which they produce for their owner. The product of capital is profit. On the basis of capitalist production it is merely a difference in the employment of money, whether it is expended as money or advanced as capital. Money, or commodities, are in themselves, potentially, capital, just as labor-power is potential capital. For in the first place, money may be converted into elements of production and is to that extent only an abstract expression of them, personifying their existence as values; in the second place, the material elements of wealth have the capacity of being even potentially capital, because the opposite supplement, which makes capital of them, namely wage-labor, is present on the basis of capitalist production.

The opposing social peculiarities of material wealth, its antagonism to labor in the form of wage-labor, considered apart from the process of production, are expressed even in capitalist property as such. This particular fact, when separated from the process of capitalist production itself, of which it is a constant result and, being its constant result, is its constant prerequisite, expresses itself in such a way that money and commodities alike become latent, potential, capital,

so that they may be sold as capital, and that they represent in this form a command over the labor of others, a claim to the appropriation of the labor of others, so that they become self-expanding values. In this way it also becomes clearly apparent that this relation supplies the title and means for the appropriation of the labor of others, and that this is not due to any labor offered as an equivalent on the part of the capitalist.

Capital appears furthermore as a commodity, inasmuch as the division of profit into interest and profit proper is regulated by demand and supply, that is, by competition, just as are the market-prices of commodities. But in the present case the difference becomes quite as apparent as the analogy. If demand and supply balance, the market-price of commodities corresponds to their price of production. In other words, their price is then seen to be regulated by the internal laws of capitalist production, independently of competition, since the fluctuations of supply and demand do not explain anything but the deviations of market-prices from the prices of production. These deviations balance mutually, so that in the course of long periods the average market-prices correspond to the prices of production. As soon as these prices coincide, these forces cease to operate, they compensate one another, and the general law determining prices then applies also to individual cases. The market-price then corresponds even in its immediate form, and without the help of averages drawn from the movements of market-prices, to the price of production, which is regulated by the immanent laws of the mode of production itself. The same is then true of wages. If supply and demand balance, they neutralise each other's effects, and wages are then equal to the value of labor-power. But it is different with the interest on money-capital. Competition does not, in this case, determine the deviations from the rule, but there is rather no law of division except that enforced by competition, because no such thing as a "natural" rate of interest exists, as we shall see presently. By the natural rate of interest people merely mean the rate fixed by free competition. There are no "natural" limits for the rate

of interest. Whenever competition does not merely determine the deviations and fluctuations, in other words, whenever a neutralisation of the opposing forces of competition puts a stop to all determination, the thing to be determined becomes a matter of arbitrary and lawless estimation. We shall dwell on this further in the next chapter.

In the case of interest-bearing capital, everything is outward appearance: The advance of capital seems a mere transfer from the lender to the borrower; the reflux of realised capital a mere transfer back to its owner, a return payment with interest from the borrower to the lender. The same holds good of the fact, due to the capitalist mode of production, that the rate of profit is not merely determined by the relation of the profit made in one single turn-over to the advanced capital-value, but also by the length of the time of turn-over itself, so that it is a question of a profit realised on the industrial capital in definite periods of time. This likewise appears in the case of interest-bearing capital in the outward fact, that a definite interest is paid to the lender for a definite period of time.

With his customary insight into the internal connection of things, the romantic Adam Müller says (*"Elemente der Staatskunst,"* Berlin, 1809, p. 37): "In determining the prices of things, time is not considered; while in the determination of interest, it is principally time which is taken into account." He does not see that the time of production and the time of circulation enter into the determination of the price of commodities, and that this is precisely what determines the rate of profit for a given time of turn-over of capital, while the determination of profit for a certain time in its turn determines that of interest. His sagacity consists here, as it always does, in seeing the clouds of dust on the surface and having the presumption to declare this dust to be something mysterious and important.

CHAPTER XXII.

DIVISION OF PROFIT. RATE OF INTEREST. NATURAL RATE OF INTEREST.

The object of this chapter, and in general all other phenomena of credit requiring our consideration later on, cannot here be analysed in detail. The competition between lenders and borrowers and the resulting minor fluctuations of the money-market fall outside of the scope of our inquiry. The circle described by the rate of interest during the industrial cycle requires for its presentation the analysis of this cycle itself, but this is likewise beyond our intentions for the present. The same is true of the greater or lesser approximate equalisation of the rate of interest in the world market. We merely intend here to analyse the independent form of interest-bearing capital and the individualisation of interest as differentiated from profit.

Since interest is merely a part of profit, paid according to our assumption by the industrial capitalist to the money-capitalist, the maximum limit of interest is marked by profit itself, and in that case the portion pocketed by the productive capitalist would be equal to zero. Aside from exceptional cases, in which interest might be actually larger than profit and could not be paid out of profit, one might consider as the maximum limit of interest the entire profit minus that portion (to be subsequently analysed), which resolves itself into wages of superintendence. The minimum limit of interest is wholly undefinable. It may fall to any depth. But counteracting circumstances will always appear and lift it again above this relative minimum.

"The relation between the amount paid for the use of some capital and this capital itself expresses the rate of interest, measured in money." "The rate of interest depends, 1), on the rate of profit; 2), on the proportion in which the total

profit is divided between the lender and the borrower." (*Economist,* January 22nd, 1853.) "Since that which is paid as interest for the use of that which is borrowed is a part of the profit, which the borrowed is able to produce, this interest must always be regulated by that profit." (Massie, l. c., p. 49.)

Let us first assume, that a fixed relation exists between the total profit and that one of its parts, which has to be paid as interest to the money-capitalist. In this case it is evident, that the interest will rise or fall with the total profit, and this profit is determined by the general rate of profit and its fluctuations. For instance, if the average rate of profit were 20% and the interest one-quarter of the profit, then the rate of interest would be 5%; if the rate of profit were only 16%, the rate of interest would be 4%. With a rate of profit of 20%, the rate of interest might rise to 8%, and yet the industrial capitalist would still make the same profit as he would with the rate of profit at 16% and the rate of interest at 4%, namely 12%. If the interest should rise only to 6 or 7%, he would keep a still larger share of the profit. If the interest amounted to a constant quota of the average profit, it would follow, that to the extent that the general rate of profit would rise, the absolute difference between the total profit and the interest would increase, and to the same extent would that portion of the total profit increase, which the productive capitalist would pocket, and vice versa. Take it that the interest amounts to one-fifth of the average profit. One-fifth of 10 is 2; difference between total profit and interest 8. One-fifth of 20 is 4; difference $20 - 4 = 16$. One-fifth of 25 is 5; difference $25 - 5 = 20$. One-fifth of 30 is 6; difference $30 - 6 = 24$. One-fifth of 35 is 7; difference $35 - 7 = 28$. The different rates of interest of 4, 5, 6, 7% would in this case always represent one-fifth of the total profit. If the rates of profit are different, then different rates of interest may represent the same aliquot parts of the total profit, or the same percentage of the total profit. With such constant proportions of interest, the industrial profit (the difference between the total profit and the interest) would be so much greater, the

higher the average rate of profit would be, and vice versa.

Assuming all other conditions to be equal, in other words, assuming the proportion between interest and total profit to be more or less constant, the productive capitalist will be able and willing to pay a higher or lower interest directly proportional to the level of the rate of profit.[62] Since we have seen, that the height of the rate of profit is inversely proportional to the development of capitalist production, it follows that the high or low rate of interest in a certain country is to the same extent inversely proportional to the degree of industrial development, at least so far as differences in the rate of interest actually expresses differences in the rates of profit. And this mode of regulating interest applies even to its average.

In any event the average rate of profit is the ultimate limit determining the maximum limit of interest.

The fact that the rate of interest is related to the average profit will be considered more at length immediately. Whenever a certain whole, such as profit, is to be divided between two parties, the first thing to be considered is the magnitude of the whole. The magnitude of the profit is determined by its average rate. Assuming the average rate of profit, and thus the magnitude of profit, for a capital of a certain size, to be given (for instance 100), it is evident that the variations of interest will be inversely proportional to those of the profit remaining in the hands of the capitalist working with a borrowed capital. And the circumstances, which determine the amount of profit to be divided (the values produced by unpaid labor), differ widely from those, which determine its distribution between these two kinds of capitalists, and frequently produce effects in opposite directions.[63]

If we observe the cycles of variation, in which modern in-

[62] "The natural rate of interest is governed by the profits of trade to particulars." (Massie, l. c., p. 51.)

[63] At this place the manuscript contains the following statement: "The course of this chapter shows, that it is preferable, before analysing the laws of the distribution of profits, to ascertain first the way in which the division of quantities becomes one of quality. In order to make a transition to this end from the preceding chapter, nothing is needed but the provisional assumption, that interest is a certain indefinite portion of the profit.

dustry moves along — condition of rest, increasing activity, prosperity, overproduction, crisis, stagnation, condition of rest, etc., which fall outside of the scope of our analysis — we shall find, that a low rate of interest generally corresponds to periods of prosperity, or of extra profit, a rise of interest to the transition between prosperity and its reverse, and a maximum of interest up to a point of extreme usury to the period of crises.[64] With the summer of 1843 came a period of remarkable prosperity; the rate of interest, which had still been $4\frac{1}{2}\%$ in the spring of 1842, fell to 2% in the spring and summer of 1843;[65] in September it fell even to $1\frac{1}{2}\%$. (Gilbart, I, p. 166); whereupon it rose to 8% and more during the crisis of 1847.

It may happen, however, that low interest is found in times of stagnation, and moderately rising interest in times of increasing activity.

The rate of interest reaches its highest point during crises, when money must be borrowed in order to meet payments at any cost. Since a rise of interest implies a fall in the price of securities, this offers at the same time a fine opportunity to people with available money-capital, who may acquire possession at cut-rate prices of such interest-bearing securities as must at least regain their average price in the regular course of things, as soon as the rate of interest falls again.[66]

However, there is also a tendency of the rate of interest to fall, quite independently of the fluctuations of the rate of profit. This is due to two main causes.

I. "Let us assume that capital were never borrowed for

[64] "In the first period, immediately after a time of depression, money is plentiful without any speculation; in the second period money is plentiful and speculation flourishing; in the third period speculation begins to let up and money is in demand; in the fourth period money is scarce and the depression starts in." (Gilbart, l. c., p. 144.)

[65] Tooke explains this by "the accumulation of surplus capital necessarily accompanying the scarcity of profitable employment for it in previous years, by the release of hoards, and by the revival of confidence in commercial prospects." (*History of Prices from* 1839 *till* 1847. London, 1848, p. 54.)

[66] "An old customer of a banker was refused a loan upon a 200,000 pounds sterling bond; when about to leave to make known his suspension of payment, he was told there was no necessity for the step, under the circumstances the banker would buy the bond at 150,000 pounds sterling." (*The Theory of the Exchanges. The Bank Charter Act of* 1844, etc. London, 1869, p. 80.)

any other but productive investments, it is nevertheless possible, that the rate of interest may vary without any change in the rate of gross profits. For, as a people progresses in the development of wealth, there arises and grows more and more a class of people, who find themselves possessed of funds through the labors of their ancestors, and who can live on the mere interest on them. Many, having actively participated in business in their youth and prime, retire, in order to live quietly in their old age on the interest of the sums accumulated by them. These two classes have a tendency to increase with the growing wealth of the country; for those who start out with a moderate capital acquire more easily an independent fortune than those, who start out with little. In old and rich countries, therefore, that portion of the national capital, whose owners do not care to invest it themselves, makes up a larger proportion of the total productive capital of society than in newly settled and poor countries. How numerous is not the class of annuity-holders in England! In proportion as the class of annuity-holders increases, that of the capital loaners increases also, for they are both the same." (Ramsay, *Essay on the Distribution of Wealth*, p. 201)

II. The development of the credit system, and with it the continually growing control of the industrials and merchants over the money savings of all classes of society by the co-operation of bankers, and the progressive concentration of these savings into such volumes as will enable them to serve as money-capital, must also depress the rate of interest somewhat. We shall discuss this more at length later.

With reference to the determination of the rate of interest, Ramsay says that it "depends in part on the rate of gross profits, in part on the proportion in which this is divided into interest and profits of enterprise. This proportion depends on the competition between lenders and borrowers of capital. This competition is influenced, but not exclusively regulated, by the prospective rate of gross profits.[67] Competition is

[67] Since the rate of interest is on the whole determined by the average rate of profit, extraordinary swindling may often go hand in hand with a low rate of interest. Instance the railroad swindle in the summer of 1844. The rate of interest of the Bank of England was not raised to 3% until October 16th, 1844.

not exclusively regulated thereby, because on one side many are borrowing without any intention of productive investment, and because on the other the magnitude of the total loanable capital changes with the wealth of the country, independently of any change in the gross profits." (Ramsay, l. c., p. 206, 207.)

In order to find the average rate of interest, it is necessary, 1), to calculate the average rate of interest during its variations in the great industrial cycles; 2), to find the rate of interest in such investments as require loans of capital for a long time.

The average rate of interest prevailing in a certain country — as differentiated from the continually fluctuating market rates — cannot be determined by any law. In this sense there is no such thing as a natural rate of interest, such as economists speak of when mentioning a natural rate of profit and a natural rate of wages. Massie has justly said with reference to this (p. 49): "The only thing which any man can be in doubt about on this occasion, is, what proportion of these profits do of right belong to the borrower, and what to the lender; and this there is no other method of determining than by the opinions of borrowers and lenders in general; for right and wrong, in this respect, are only what common consent makes so." The balancing of demand and supply — assuming the average rate of profit to be a fact — does not signify anything here. Wherever else this formula serves as an excuse (and is then practically correct) it is used to find the fundamental rule, which is independent of competition and rather determines it, this rule indicating the regulating limits, or the limiting magnitudes, of competition; this formula serves particularly as a help to those, who are bounded by the horizon of practical competition, its phenomena, and the conceptions arising from them, and who try thereby to get a rather shallow grasp of the internal connections of economic conditions within the sphere of competition. It is a method by which to pass from the variations that go with competition to the limits of these variations. This is not so in the case of the average rate of interest. There is no reason

by which the idea could be justified, that the average conditions of competition, a balance between lenders and borrowers, should secure for the lender a rate of interest of 3, 4, 5%, etc., on his capital, or a certain percentage of the gross profits, say 20% or 50%. Whenever competition as such determines anything in this matter, its determination is a matter of accident, purely empirical, and only pedantry or fantasticalness can attempt to represent this accidental character as something necessary.[68] Nothing is more amusing than to listen in the reports of Parliament of 1857 and 1858 concerning bank legislation and commercial crises to the rambling twaddle of directors of the Bank of England, London bankers, provincial bankers, and theoretical professionals, when referring to "the real rate produced." They never get beyond such commonplaces as that "the price paid by loanable capital probably varies with the supply of such capital," that "a high rate of interest and a low rate of profit cannot exist together in the long run," and similar specious platitudes.[69] Custom, legal tradition, etc., have as much to do with the determination of the average rate of interest as competition itself, so far as this rate exists not merely as an average figure, but as an actual magnitude. An average rate of profit has

[68] For instance, J. G. Opdyke, in his "*Treatise on Political Economy*" (New York, 1851) makes a very unsuccessful attempt to explain the general extension of a rate of interest of 5% by eternal laws. Still more naively proceeds Mr. Karl Arnd in "*Die naturgemässe Volkswirthschaft gegenüber dem Monopoliengeist und dem Kommunismus,* etc., Hanau, 1845." There we may read: "In the natural course of the production of goods there is only *one* phenomenon, which, in the fully settled countries, seems to be destined to regulate in some measure the rate of interest; this is the proportion, in which the quantities of wood of the European forests increase through their annual new growth. This new growth takes place, quite independently of their exchange value, at the rate of 3 or 4 to 100." (How queer that the trees should arrange for their new growth independently of their exchange value!) "According to this a fall of the rate of interest below its present level in the richest countries cannot be expected." Page 124. (He means, because the new growth of the trees is independent of their exchange value, even though their exchange value may depend on their new growth.) This deserves to be called "the primordial rate of forest interest." Its discoverer has made further meritorious contributions in this work to "our science" as the "philosopher of the dog tax."

[69] The Bank of England raises and lowers the rate of its discount, always, of course, with due consideration of the rate prevailing in the open market, according to the imports and exports of gold. "By which gambling in discounts, by anticipation of the alterations in the bank rate, has now become half the trade of the great heads of the money centre"— that is, of the London money market. (*The Theory of the Exchanges,* etc., p. 113.)

to be assumed as a legal rate even in many law disputes, in which interest has to be calculated. Now, if we press the inquiry, why the limits of an average rate of interest cannot be deduced from general laws, we find the answer simply in the nature of interest. It is merely a portion of the average profit. The same capital appears in two roles, as a loanable capital in the hands of the lender, and as an industrial capital, or commercial capital, in the hands of the investing capitalist. But it performs its function as capital only once, and produces profit only once. In the process of production itself, the loanable nature of this capital does not play any role. To what extent the two parties divide the profit, in which they both share, is in itself as much a purely empirical fact belonging to the realm of accident as the division of the shares of common profit of some corporative business among different share holders by percentages. In the division between surplus-value and wages, on which the determination of the rate of profit essentially rests, the decision is made by two very different elements, labor-power and capital; these are functions of two independent variables, which limit one another; and their *qualitative difference* is the source of the *quantitative division* of the produced value. We shall see later that the same takes place in the division of surplus-value between rent and profit. But nothing of the kind occurs in the case of interest. In this case the *qualitative differentiation*, as we shall see immediately, proceeds rather from the purely *quantitative division* of the same lot of surplus-value.

From what has gone before it follows that there is no such thing as a "natural" rate of interest. But while, in distinction from the general rate of profit, there is on one side no general law, by which the limits of the average interest, or average rate of interest, may be determined and differentiated from the continually fluctuating market rates of interest, because it is merely a question of dividing the gross profit between two possessors of capital under different titles, there is on the other side the fact that the rate of interest, whether it be the average or the prevalent market rate, appears as a uni-

form, definite and tangible magnitude in a very different way from the general rate of profit.[70]

The rate of interest holds a similar relation to the rate of profit as the market price of a commodity does to its value. To the extent that the rate of interest is determined by the rate of profit, it is so always by the general rate of profit, not by any specific rates of profit, which may prevail in some particular lines of industry, and still less by any extra profit, which some individual capitalist may make in some particular line of business.[71] It is a fact, then, that the general rate of profit re-appears as an empirical, given, reality in the average rate of interest, although the latter is not a pure or reliable expression of the former.

It is true, that the rate of interest itself differs according to the different classes of securities offered by the borrowers and according to the length of time for which the money is borrowed; but it is uniform within every one of these classes at a given moment. This distinction, then, does not militate against a fixed and uniform shape of the rate of interest.[72]

[70] "'The price of commodities fluctuates' continually; they are all made for different uses; the money serves for all purposes. The commodities, even those of the same kind, differ according to quality; cash money is always of the same value, or at least is assumed to be so. Thus it happens that the price of money, which we designate by the term interest, has a greater stability and uniformity than that of any other thing." (J. Steuart, *Principles of Political Economy,* French translation, 1789, IV, p. 27.)

[71] "This rule of dividing profits is not, however, to be applied particularly to every lender and borrower, but to lenders and borrowers in general . . .remarkably great and small gains are the reward of skill and the want of understanding, which lenders have nothing at all to do with; for as they will not suffer by the one, they ought not to benefit by the other. What has been said of particular men in the same business is applicable to particular sorts of business; if the merchants and tradesmen employed in any one branch of trade get more by what they borrow than the common profits made by other merchants and tradesmen of the same country, the extraordinary gain is theirs, though it required only common skill and understanding to get it; and not the lenders,' who supplied them with money . . . for the lenders would not have lent their money to carry on any business or trade upon lower terms than would admit of paying so much as the common rate of interest; and therefore they ought not to receive more than that, whatever advantage may be made by their money." (Massie, l. c., p. 50, 51.)

[72] [Bank rate 5%. Market rate of discount 60 days' drafts, 5⅜%. The same for 3 months' drafts 3½%. The same for 6 months' drafts 3 5/16%. Loans to bill brokers, day to day, 1 to 2%. The same for one week 3%. Last rate for fortnightly loans to stockholders 4¼ to 5%. Deposit allowance (banks) 3½%. The

The average rate of interest appears in every country for long epochs as a constant magnitude, because the general rate of profit — in spite of the continual variation of the particular rates of profit, in which a variation in one sphere is offset by an opposite variation in another sphere — varies only in long intervals. Its relative constancy is revealed in this more or less constant nature of the average rate, or common rate, of interest.

As concerns the continually fluctuating market rate of interest, it exists at any moment as a fixed magnitude, the same as the market price of commodities, because all the loanable capital as an aggregate mass is continually facing the invested capital, so that the relation between the supply of loanable capital on one side, and the demand for it on the other, decide at any time the market level of interest. This is so much more the case, the more the development and simultaneous concentration of the credit system impregnates the loanable capital with a general social character, and throws it all at one time on the market. On the other hand, the general rate of profit always exists as a mere tendency, as a movement to compensate specific rates of profit. The competition between capitalists — which is itself this movement toward an equilibrium — consists in this case in their activity of gradually withdrawing capital from spheres, in which the profit stays for a long time below the average, and in the same way taking capital into spheres, in which the profit is above the average. Or it may also consist in their distributing additional capital gradually and in varying proportions between these spheres. It is always a matter of a continual variation between supply and demand of capital with reference to different spheres, never a simultaneous mass effect, as it is in the determination of the rate of interest.

We have seen that interest-bearing capital, although a category absolutely different from a commodity, becomes a peculiar commodity, so that interest becomes its price, which

same (discount houses) 3 to 3¼%. How large this difference may be for one and the same day is shown by the preceding figures of the rate of interest of the London money market on December 9th, 1889, taken from the city article of the *Daily News* of December 10th. The minimum is 1%, the maximum 5%. F. E.]

is fixed at any time by supply and demand, just as the market price of an ordinary commodity is fixed. The market rate of interest, while continually oscillating, appears therefore at any moment just as constantly fixed and uniform as the prevailing market price of commodities. The money-capitalists offer this commodity, and the investing capitalists buy it and make a demand for it. This does not take place in the equalisation of profits toward a general rate of profit. If the prices of commodities in a certain sphere are below or above the price of production (leaving aside any oscillations, which are found in every business and are due to fluctuations of the industrial cycles), a balance is effected by an expansion or restriction of production. This signifies an expansion or restriction of the quantities of commodities thrown on the market by industrial capitalists, by means of immigration or emigration of capital to and from particular spheres. It is by such a compensation of the average market prices of commodities to prices of production that the deviations of specific rates of profit from the general, or average, rate of profit are corrected. This process does not, and cannot, at any time assume the appearance as though the industrial or mercantile capital *as such* were commodities seeking a buyer, but it does in the case of interest-bearing capital. To the extent that this process is perceptible, it is so only in the oscillations and compensations of the market prices of commodities to prices of production, not in any direct fixation of the average profit. The general rate of profit is actually determined, 1), by the surplus-value produced by the capital; 2), by the proportion of this surplus-value to the value of the total capital; and, 3), by competition, but only to the extent that this is a movement, by which capitals invested in particular spheres seek to draw equal dividends out of this surplus-value in proportion to their relative magnitudes. The general rate of profit, then, derives its determination actually from causes, which are quite different and far more profound than those of the market rate of interest, which is directly and immediately determined by the proportion between supply and demand. It is, therefore, not such a tan-

gible and obvious fact as the rate of interest. The particular rates of interest in the different spheres of production are themselves more or less unsettled; but so far as they are perceptible, it is not their uniformity, but their differences, which appear. The general rate of profit itself appears only as the minimum limit of profit, not as the empirical and directly visible shape of the actual rate of profit.

In emphasizing this difference between the rate of interest and the rate of profit, we still leave out of consideration the following two circumstances, which favor the consolidation of the rate of interest: 1), The historical pre-existence of interest-bearing capital and the existence of a traditionally sanctioned general rate of interest; 2), the far greater direct influence exerted by the world market on the fixation of the rate of interest, independently of the economic conditions of a certain country, compared to its influence on the rate of profit.

The average profit does not appear as a directly existing fact, but merely as a final result of the compensation of opposite fluctuations, to be ascertained by analysis. Not so the rate of interest. It is, at least in its local validity, a daily fixed thing, a fact which serves even to industrial and mercantile capitals as a prerequisite and figure in their calculations. It becomes a general faculty of every sum of money of 100 pounds sterling to yield 2, 3, 4, 5%. Meteorological reports do not register the stand of the barometer and thermometer more accurately than the reports of the Bourse do the stand of the rate of interest, not for this or that capital, but for the money-capital on the market, for the available loanable capital in general.

On the money market only lenders and borrowers face one another. The commodity has the same form, money. All specific forms of capital according to its investment in particular spheres of production or circulation are here blotted out. It exists here in the undifferentiated, homogenous, form of independent value, money. The competition of the individual spheres ceases here. They are all thrown together as borrowers of money, and capital likewise faces all of them in

a form, in which it is as yet indifferent to its definite investment in this or that specific manner. The character worn by industrial capital only in its movement and competition between individual spheres, *the character of a common capital of a class* comes into evidence here in full force by the demand and supply of capital. On the other hand, money-capital on the money market has actually that form, in which it may be distributed as a common element among the capitalists in the various spheres, regardless of its specific employment, as the requirements of production in each individual sphere may dictate. Add to this that with the development of large scale industry money-capital, so far as it appears on the market, is not represented by some individual capitalist, not by the owner of this or that fraction of the capital on the market, but assumes more and more the character of an organised mass, which is far more directly subject to the control of the representatives of social capital, the bankers, than actual production is. Under these circumstances, not only the demand for loanable capital is expressed with the full force of a class, but also its supply appears as loanable capital in masses.

These are some of the reasons, why the general rate of profit appears as a vanishing shape of mist compared to the definite rate of interest, which, while fluctuating in its magnitude, yet faces all borrowers as a fixed fact, because it varies uniformly for all of them. In like manner the variations in the value of money do not prevent it from having the same value for all commodities. In like manner the market prices of commodities fluctuate daily, yet this does not prevent them from being reported daily. In like manner, the rate of interest is regularly reported as "the price of money." It is so for the reason that capital itself is here offered in the form of money as a commodity. The fixation of its price is thus a fixation of its market price, as it is with all other commodities. Thus the rate of interest always appears as the general rate of interest, as so much for so much money, as a definite quantity. Not so the rate of profit. It may vary even within the same sphere for commodities with the same

price, according to the different conditions under which different capitals produce the same commodity. For the rate of profit of the individual capital is determined, not by the market price of a commodity, but by the difference between the market-price and the cost-price. And these different rates of profit, first within the same sphere and then between different spheres themselves, can be balanced only by continual fluctuations.

(Note for later elaboration): A specific form of credit. It is known that when money serves as a means of payment instead of as a means of purchase, the commodity is transferred, but its value is not realised until later. If payment is not made until after the commodity has again been sold, then this sale does not seem to be the result of the purchase, but it is by this sale that the purchase is realised. In other words, the sale becomes a means of purchase.— Secondly; Titles to debts, bills of exchange, etc., become means of payment for the creditor.— Thirdly: The compensation of titles to debts replaces the money.

CHAPTER XXIII.

INTEREST AND PROFIT OF ENTERPRISE.

Interest, as we have seen in the two preceding chapters, seems to be originally, is originally, and remains in fact merely a portion of profit, of surplus-value, which the investing capitalist, whether industrial or commercial, has to pay over to the owner and lender of money-capital whenever he uses loan capital instead of his own. If he employs only his own capital, no such division of profit takes place; it is all his. In fact, to the extent that the owners of capital employ it themselves in the process of reproduction, they do not compete in the determination of the rate of interest. This alone shows that the category of interest, an impossibility without a determination of the rate of interest, is alien to the movements of industrial capital itself.

"The rate of interest may be defined to be that proportional sum which the lender is content to receive, and the borrower to pay, for a year or for any longer or shorter period for the use of a certain amount of moneyed capital . . . when the owner of capital employs it actively in reproduction, he does not come under the head of those capitalists, the proportion of whom, to the number of borrowers, determines the rate of interest." (Th. Tooke, *History of Prices,* Newmarch ed. London, 1857, II, p. 355.) It is indeed only the separation of capitalists into money capitalists and industrial capitalists, which transforms a portion of the profit into interest, which creates the category of interest at all; and it is only the competition between these two kinds of capitalists which creates the rate of interest.

So long as capital serves in the process of reproduction — even assuming that it belongs to the industrial capitalist himself, so that he has no need of paying it back to some lender — just so long the capitalist has at his disposal as a private individual, not this capital itself, but only the profit, which he may spend as revenue. So long as his capital performs the functions of capital, it belongs to the process of reproduction, it is tied up in that process. He is indeed its owner, but this ownership does not enable him to dispose of it in some other way, so long as he uses it as capital for the exploitation of labor. It is the same with the money-capitalist. So long as his capital is loaned out and serves as money-capital, it brings him as interest a portion of the profit, but he cannot dispose of the principal. This becomes evident, whenever he loans his capital, say, for one year, or longer, and receives interest at certain stipulated times without recovering his principal. But even the return of the principal does not make any difference here. If he gets it back, then he must always loan it out again, so long as he expects it to produce the effects of capital, in this case of money-capital, for him. While he is keeping it in his own hands, it collects no interest, it does not act in the capacity of capital; and so long as it gathers interest and serves as capital, it is not in his hands. This accounts for the possibility to loan capital for all eter-

nity. The following remarks of Tooke against Bosanquet are, therefore, entirely wrong. He quotes Bosanquet (*Metallic, Paper, and Credit Currency*, p. 73): "If the rate of interest were depressed to 1%, then borrowed capital would be almost on a par with owner's capital." Tooke makes the following comment on this: "That a capital borrowed at this, or even at a lower rate, should be considered as being almost on a par with one's own capital is such a strange contention, that it would hardly deserve any serious consideration, did it not come from so intelligent a writer, who is so well informed on particular points of his subject. Has he overlooked the fact, or does he hold it to be so unimportant, that his assumption implies the condition of return payment?" (Th. Tooke, *An Inquiry into the Currency Principle*, 2nd. edition, London, 1844, p. 80.) If interest were equal to zero, then the industrial capitalist working with a borrowed capital would be on a par with a capitalist working with his own capital. Both of them would pocket the same average profit, and capital, whether borrowed or the owner's, serves as capital only to the extent that it produces profit. The condition of return payment would not alter this in the least. The more the rate of interest approaches zero, falling, for instance, to 1%, the more borrowed capital is placed on a par with owner's capital. So long as money-capital is expected to act in the capacity of money-capital, it must always be loaned out again and again, and this must take place at the prevailing rate of interest, say 1%, and always to the same class of industrial and commercial capitalists. So long as these perform the functions of capitalists, the only difference between one working with a borrowed and one working with his own capital is that the one has to pay interest and the other has not; that the one pockets the whole profit p, and the other only p — i, profit minus interest. To the extent that the interest approaches zero, p — z becomes equal to p, and to the same extent do both capitals stand on a par. The one must pay back the capital and borrow it again; but the other, so long as his capital is expected to perform its function, must likewise advance it again and again to the process of produc-

tion and cannot dispose of it freely without any dependence upon this process. The only remaining difference between the two is the obvious one that the one is the owner of his capital and the other is not.

The question which arises here is this: How is it that this purely quantitative division of profit into net profit and interest turns into a qualitative one? In other words, how is it that even the capitalist who employs only his own capital, and not a borrowed one, ranges a portion of his gross profit under the specific category of interest and calculates it separately as such? And furthermore, why is all capital, whether borrowed or not, differentiated in itself as interest-bearing capital from net profit producing capital?

It is understood that not every accidental quantitative division of profit turns in this manner into a qualitative one. For instance, some industrial capitalists associate for some business and divide the profits among themselves according to some legal agreement. Others carry on their business, each by himself, without any associate. These last do not calculate their profit under two heads, one part as individual profit, the other as profits of the company for associates who do not exist. In this case the quantitative division does not turn into a qualitative one. It takes place, when the ownership is vested accidentally in several juridical personalities. It does not take place, when this is not the case.

In order to answer this question, we must dwell a little longer on the actual point of departure of the formation of interest; that is, we must take our departure from the assumption, that the money-capitalist and the industrial capitalist really face one another, not merely as legally different persons, but as persons playing entirely different roles in the process of reproduction, or as persons in whose hands the same capital really passes through a twofold and wholly different movement. The one merely loans it, the other employs it productively.

For the productive capitalist, who works with a borrowed capital, the gross profit falls into two parts, namely into the interest to be paid by the lender and the surplus over the in-

terest forming his own share of the profit. If the general rate of profit is given, then this last portion is determined by the rate of interest; if the rate of interest is given, then this last portion is determined by the general rate of profit. And furthermore: Whatever may be the divergence in any individual case of the gross profit, the actual magnitude of value of the total profit, from the average profit, it does not alter the fact that the portion belonging to the investing capitalist is determined by the interest, since this is fixed by the general rate of interest (aside from special legal stipulations) and assumed to be paid beforehand, before the process of production begins, and before its result, the gross profit, has been made. We have seen that the peculiar and specific product of capital is surplus-value, or more closely defined, profit. But for the capitalist working with a borrowed capital it is not the profit, but the profit minus the interest, that portion of the profit which remains for him after the interest has been deducted. This portion of the profit necessarily appears to him as the product of a capital performing its function; and so far as he is concerned it is really so, because he is the representative of capital in action. He is its personification to the extent that it is in function, and it performs its function to the extent that it is profitably invested in industry or commerce and engaged, through its employer, in such operations as are prescribed by the line of its industry. In distinction from interest, which he has to pay out of the gross profits to the lender, the remaining portion of the profit, which he pockets, necessarily assumes the form of industrial or commercial profit, or, to designate it by a term comprising both of them, the form of profit of enterprise. If the gross profit is equal to the net profit, then the magnitude of this profit of enterprise is exclusively determined by the rate of interest. If the gross profit varies from the average profit, then its difference from the average profit (after deducting the interest from both of them) is determined by all constellations causing a temporary deviation, either of the rate of profit in any particular sphere from the general rate of profit, or of the profit made by some individual capitalist

in a certain sphere from the average profit of this sphere. Now, we have seen, that the rate of profit within the process of production itself does not depend merely on the surplus-value, but also on many other circumstances, for instance, on the purchase prices of the means of production, on methods more productive than the average, on economies in constant capital, etc. And aside from the price of production, it depends on special constellations of the market, and in every business transaction on the greater or lesser smartness and thrift of the individual capitalists, whether, and to what extent, a man will buy or sell above or below the price of production and thus appropriate in the process of circulation a greater or smaller portion of the total surplus-value. At any rate the quantitative division of the gross profit turns here into a qualitative one, and it does so all the more as the quantitative division itself depends on the nature of thing that is to be divided, on the manner in which the capitalist manages his capital, and on the amount of gross profit it yields for him in his capacity as active capitalist. The investing capitalist is here assumed not to be the owner of the capital. The ownership of capital is vested in the money-capitalist, who stands opposed to him. The interest, which he pays to the lender, thus appears as that portion of the gross profit, which is absorbed by the ownership of capital as such. In distinction therefrom, that portion of the profit, which falls to the share of the investing capitalist, appears then as profit of enterprise, arising solely from the operations, or functions, which he performs with the capital in the process of reproduction, particularly of those functions, which he performs as the impersonator of enterprise in industry or commerce. From his point of view, the interest appears merely as the fruit of the ownership of capital, of capital "itself" abstracted from the process of capital in reproduction, of a capital not "working," not performing its function; while profit of enterprise appears to him as the exclusive fruit of the functions, which he performs with the capital, a fruit of the movements and performances of capital, of performances, which appear to him as his own activity as

differentiated from the inactivity, the non-participation, of the money-capitalist in the process of production. This qualitative separation of the two portions of gross profit, which makes interest appear as the fruit of abstract capital, of the ownership of capital outside of the process of production, and profit of enterprise as the fruit of capital performing its function in the process of production, of the active role played by the employer of capital in the process of reproduction, this qualitative separation is by no means merely a subjective point of view of the money-capitalist on one side and of the industrial capitalist on the other. It rests upon an objective fact, for the interest flows into the hands of the money-capitalist, the lender, the mere owner of capital, who represents only capital property before the process of production and outside of it; while the profit of enterprise flows only into the hands of the investing capitalist, who is not the owner of the capital.

In this way, both the industrial capitalist working with borrowed capital and the money-capitalist not working himself with his capital play a role, in which a merely quantitative division of the gross profit between two persons having two different legal titles to the same capital and to the profit produced by it turns into a qualitative division. One portion of the profit appears now as interest, as a fruit coming to capital in *one* of its forms; the other portion appears as a specific fruit of capital in an opposite form, and thus as profit of enterprise. One appears as the fruit of mere ownership of capital, the other as a fruit of the performance of the function of capital, as a fruit of capital in process, of the functions performed by the active capitalist. And this ossification and individualisation of the two parts of the gross profits among themselves, as though they were derived from two essentially different sources, now becomes a fixture for the entire capitalist class and the total capital. And this takes place regardless of whether the capital employed by the active capitalist is borrowed or not, and whether the capital belonging to the money-capitalist is employed by himself or not. The profit of every capital, and consequently the aver-

age profit established by a mutual compensation of capitals, is separated into two qualitatively different, separately individualised, and mutually independent parts, to wit, interest and profit of enterprise, both of which are determined by particular laws. The capitalist working with his own capital divides the gross profit into interest due to himself as its owner lending it to himself, and into profit of enterprise due to himself as an active capitalist performing his function, just as does the capitalist working with a borrowed capital. For this division, in its qualitative aspects, it becomes immaterial whether the capitalist really has to divide his profit with another or not. The employer of capital, even when working with his own capital, falls apart into two personalities, into the mere owner of capital and the employer of capital; his capital itself, with reference to the categories of profit which it yields, falls apart into capital property outside of the process of production and yielding interest of itself, and capital in the process of production yielding profit of enterprise through its function in the process.

Interest, then, becomes so firmly established, that it no longer appears as a division of gross profits, to which production is indifferent and which takes place only occasionally when the industrial capitalist works with the capital of some other man. Even when he works with his own capital, his profit is separated into interest and profit of enterprise. Thus a merely quantitative division turns into a qualitative one. It takes place without regard to the fact, whether the industrial capitalist is, or is not, the owner of the capital employed by him. It is no longer a question of different quota of profit assigned to different persons, but of two different categories of profit holding different relations to the capital, being related to different forms of capital.

It is a simple matter, in view of the foregoing remarks, to explain, why this character of qualitative separation becomes established for the total social capital and the entire capitalist class, as soon as the separation of gross profits into interest and profits of enterprise has assumed its qualitative aspect.

1) This follows from the simple empirical circumstance, that the majority of the industrial capitalists, even if in dif-

ferent proportional numbers, work with their own and with borrowed capital, and that the proportion between self-owned and borrowed capital changes in different periods.

2) The transformation of a portion of the gross profits into the shape of interest converts the other portion into profit of enterprise. The latter is indeed but the antagonistic form assumed by the excess of the gross profit over the interest, as soon as interest exists as an independent category. The entire analysis of the problem, how gross profit is differentiated into interest and profit of enterprise, resolves itself into the inquiry, how a portion of the gross profits becomes universally ossified and individualised in the shape of interest. Now, historically, interest-bearing capital exists as a complete, traditional form, and with it interest as a ready subdivision of the surplus-value produced by capital, long before the capitalist mode of production and the conceptions of capital and profit belonging to it existed. Thus it is that popular conception still regards money-capital, interest-bearing capital, as typical capital, as capital *par excellence*. Thus, also, we find up to the time of Massie the prevailing idea, that it is money as such, which is paid in interest. The fact that loaned capital yields interest, whether it is actually employed as interest or not — even when borrowed only for consumption — lends strength to the idea of the independence of this form of capital. The best proof of the independence, which interest seemed to have with reference to profit and interest-bearing capital with reference to industrial capital, during the first periods of the capitalist mode of production, is that it was not until the middle of the 18th century that Massie, and after him Hume, discovered the fact that interest is but a portion of the gross profit, and that such a discovery was necessary at all.

3) Whether the industrial capitalist works with his own or with borrowed capital, it does not alter the fact that the class of money-capitalists face him as a special class of capitalists, money-capital as an independent form of capital, and interest as the independent form of surplus-value peculiar to this specific capital.

Qualitatively speaking, interest is surplus-value supplied by the mere ownership of capital, yielded by capital as such, even though its owner remains outside of the process of reproduction. It is surplus-value realised by capital outside of its process.

Quantitatively speaking, that portion of profit, which forms interest, does not seem to be related to industrial or commercial capital as such, but to money-capital, and the rate of this portion of surplus-value, the rate of interest, fortifies this relation. For, in the first place, the rate of interest, despite its dependence upon the general rate of profit, is independently determined, and, in the second place, it appears with all its variations as a fixed, uniform, tangible and always given relation, just like the market-prices of commodities, compared to the intangible rate of profit. If all capital were in the hands of the industrial capitalists, there would be no interest and no rate of interest. The independent form assumed by the quantitative division of gross profit creates the qualitative one. If the industrial capitalist compares himself to the money-capitalist, only his profit of enterprise distinguishes him from the other man, the excess of his gross profit over the average interest, the latter being empirically given by means of the rate of interest. On the other hand, if he compares himself to the industrial capitalist working with his own, instead of borrowed capital, the other differs from him only as a money-capitalist by pocketing the interest instead of paying it over to some one else. On either side the portion of the gross profit differing from the interest appears to him as profit of enterprise, and interest itself as a surplus-value yielded by capital as such, which it would yield even without any productive employment.

This is practically correct for the individual capitalist. He has the choice, whether he wants to invest his capital as an interest-bearing one or as a productive one, regardless of whether it exists in the form of money-capital from the outset, or whether it has to be converted into money-capital. But to make this conception a general one and apply it to the total capital of society, as some vulgar economists do, who even

go so far as to regard this capital as the source of profit, is, of course, preposterous. The idea of a conversion of the total capital of society into money-capital without the existence of people, who shall buy and utilise the means of production, which form the total capital with the exception of relatively small portion existing in the shape of money, is sheer nonsense. It implies the additional nonsense, that capital could yield interest on the basis of capitalist production without performing any productive function, in other words, without producing any surplus-value, of which interest would be but a part; that the capitalist mode of production could run its course without any capitalist production. If an excessively large number of capitalists were to convert their capital into money-capital, it would result in an extraordinary depreciation of money-capital and an extraordinary fall of the rate of interest; many would at once be face to face with the impossibility of living on their interest, and would be compelled to retransform themselves into industrial capitalists. But we repeat that it is a fact for the individual capitalist. For this reason, he necessarily considers that part of his average profit, which is equal to the average interest, as a fruit of his capital as such, apart from the process of production, even when he works with his own capital; and he differentiates from this portion, from this interest, that surplus of the gross profit, which constitutes his profit of enterprise.

4) (A blank in the manuscript.)

We have seen that that portion of the profit, which the investing capitalist has to pay to the mere owner of borrowed capital, converts itself into the independent form of a portion of profit, which all capital as such, whether borrowed or not, yields under the name of interest. How large that portion shall be is determined by the quotation of the average rate of interest. Its origin does not show itself any more in anything but the fact that the investing capitalist, when owner of his capital, no longer competes in the determination of the rate of interest, at least not actively. The purely quantitative division of profit between two persons having different legal titles to it has turned into a qualitative

division, which seems to arise from the nature of capital and profit itself. For, as we have seen, as soon as a portion of the profit generally assumes the form of interest, the difference between the average profit and the interest, or the portion of profit exceeding the interest, assumes a form antagonistic to interest, that of profit of enterprise. These two forms, interest and profit of enterprise, exist only as opposites. They are not reduced to the surplus-value, of which they represent proportional parts cast in different moulds, but are merely referred to one another. Because one portion converts itself into interest, the other portion appears as profit of enterprise.

By profit we always mean average profit here, since the variations of individual profit and of profit in different spheres, due to the fluctuations of the competitive struggle and other circumstances affecting the distribution of the average profit, or surplus-value, do not concern us in this analysis. This applies quite generally to the foregoing inquiry.

Interest is then net profit, as Ramsay calls it, which capital as such yields, either for the mere lender remaining outside of the process of reproduction, or for the owner employing his capital productively. For this latter capitalist also, capital yields this net profit, not in his capacity as a productive capitalist, but of money-capitalist and lender of his own capital as an interest-bearing one to himself as an investing capitalist. Just as the conversion of money, and of value in general, into capital is the constant result of capitalist production, so its existence in the form of capital is its constant prerequisite. By its ability to transform itself into means of production, it commands continually unpaid labor and thereby transforms the process of production and circulation of commodities into a production of surplus-value for its owner. Interest is, therefore, merely the expression of the fact, that value in general, in other words, value representing materialised labor in its general social form, or value assuming the form of means of production in the actual process of production, faces living labor-power as an independent power, and is a means of appropriating unpaid labor; and that

it is such a power, because it represents the property of another in opposition to the laborer. But on the other hand, this opposition to wage-labor is obliterated in the form of interest; for interest-bearing capital as such has not wage-labor, but productive capital for its object. The lending capitalist faces as such the capitalist performing his actual function in the process of reproduction, not the wage-worker, who is expropriated from the means of production under capitalist production. Interest-bearing capital represents capital as *ownership* compared to capital as a *function*. But to the extent that capital does not perform its function, it does not exploit the laborers and does not come into opposition to labor.

On the other hand, profit of enterprise is not in opposition to wage-labor, but only to interest.

1) Assuming the average profit to be given, the rate of profit on enterprise is not determined by wages, but by the rate of interest. It is high or low inversely as the rate of interest is.[73]

2) The investing capitalist derives his claim to profits of enterprise, and consequently the profit of enterprise itself, not from his ownership of capital, but from its production function as distinguished from the form, in which it is only inert property. This appears as an obviously existing contrast, whenever he is working with a borrowed capital, so that interest and profits of enterprise each go to different persons. The profit of enterprise arises from the function of capital in the process of reproduction, it is a result of the operations by which the investing capitalist promotes this function of industrial and commercial capital. But to be a representative of invested capital is not a sinecure like the representation of interest-bearing capital. On the basis of capitalist production, the capitalist directs the processes of production and circulation. The exploitation of productive labor requires exertion, whether he performs it himself or has it performed by some one else in his name. In distinction from interest, his profit of enterprise appears to him as in-

[73] "The profits of enterprise depend upon the net profits of capital, not the latter upon the former." (Ramsay, l. c., p. 214. Net profits with Ramsay always mean interest.)

dependent of the ownership of capital, it seems to be the result of his function as a non-proprietor — *a laborer.*

Under these circumstances his brain necessarily conceives the idea, that his profit of enterprise, far from being in opposition to wage-labor and representing only the unpaid labor of others, is rather itself *wages of labor,* wages of superintendence of labor. These wages are superior to those of the common laborer, 1) because they pay for more complicated labor, 2) because the capitalist pays them to himself. The fact that his function as a capitalist consists in creating surplus-value, which is unpaid labor, and to create it under the most economical conditions, is entirely forgotten over the contrast, that the interest falls to the share of the capitalist, even if he does not perform any capitalist function and is merely the owner of capital; and that, on the other hand, the profit of enterprise falls to the share of the investing capitalist, even if he is not the owner of the capital, which he employs. The antagonistic form of the two parts, into which profit, or surplus-value is divided, leads him to forget, that both parts are surplus-value, and that this division does not alter the nature, origin, and living conditions of surplus-value.

In the process of reproduction, the investing capitalist represents capital as the property of another in opposition to the wage-laborers, and the money-capitalist, represented by the investing capitalist, shares in the exploitation of labor. The fact, that the investing capitalist can perform his function or employ means of production as capital only as the personification of the means of production in opposition to the laborers, is forgotten over the antagonism between the function of capital in the process of reproduction and the mere ownership of capital outside of the process of reproduction.

In fact, the forms assumed by the two parts of profit, of surplus-value, when divided into interest and profit of enterprise, do not express their relation to labor, because their relation refers only to themselves and to the profit, or rather to the surplus-value as a whole compared to them as parts of

this unit. The proportion in which the profit is divided, and the different legal titles, by which this division is sanctioned, are based on the assumption that profit is already in existence. If, therefore, the capitalist is the owner of the capital, which he employs, he pockets the whole profit, or surplus-value. It is immaterial to the laborer, whether the capitalist pockets the whole profit, or whether he has to pay over a part of it to some other person, who has a legal claim to it. The reasons for dividing the profit among two kinds of capitalists thus turn surreptitiously into reasons for the existence of the surplus-value to be divided, which the capital as such draws out of the process of reproduction quite apart from any subsequent division. Seeing that the interest is opposed to the profit of enterprise, and the profit of enterprise to the interest, that they are both opposed to one another, but not to labor, it follows that both profit of enterprise plus interest, in other words, the total profit, and further the surplus-value, are derived — from what? From the antagonistic form of its two parts! But the profit is produced, before this division takes place, and before there can be any mention of it.

Interest-bearing capital stands the test of such only to the extent that borrowed money is actually converted into capital, and that a surplus is produced with it, of which the interest is a part. But this does not militate against the fact, that the faculty of drawing interest is innate in it outside of the process of production. So does labor-power evince its faculty of producing value only so long as it is employed and materialised in the labor-process; yet this does not argue against the fact, that labor-power is potentially a faculty of creating values, which does not arise out of the mere process of production, but is rather antecedent to it. As a faculty creating value, it is bought. One might also buy it without setting it to work productively. It may be used for purely personal ends, for instance, for personal service, etc. So it is with capital. It is the borrower's affair, whether he employs it as capital, actually setting in motion its inherent faculty of producing surplus-value. What he pays, is in

either case the surplus-value inherently latent in the commodity capital.

Let us now consider profit of enterprise more in detail.

Since the specific social faculty of capital under capitalist production, that of being property in the hands of one and yet commanding the labor-power of another, becomes fixed, so that interest appears as a part of the surplus-value produced by capital in this interrelation, the other part of the surplus-value, the profit of enterprise, must necessarily appear as derived, not from capital as such, but from the process of production, separated from its social faculty, which is already expressed as a distinct mode of existence by the term interest in capital. Now, separated from capital, the process of production is simply a labor-process. Hence the industrial capitalist as differentiated from the owner of capital does not appear, in this case, as a functionary of capital, but as a functionary separated from capital, as a simple agent of the labor-process, as a laborer, and specifically as a wage-laborer.

Interest itself expresses precisely the existence of the conditions of labor in the form of capital, in their social antagonism to labor, and in their transformation into personal powers in opposition to labor and dominating it. Interest represents the mere ownership of capital as a means of appropriating the products of the labor of others. But it represents this character of capital as something, which belongs to it outside of the process of production, and which is not by any means a result of the specifically capitalist nature of this process of production itself. Interest places this process in such a light, that it does not seem opposed to labor, but rather without any relation to labor and simply the relation of one capitalist toward another. It thus assumes a form which places it outside of the relation of capital toward labor, and renders it indifferent toward this relation. In interest, then, which is that specific form of profit, in which the antagonistic character of capital assumes an independent form, this is done in such a way, that the antagonism here appears com-

pletely obliterated and left out of consideration. Interest is a relation between two capitalists, not between a capitalist and a laborer.

On the other hand, this form of interest bestows upon the other portion of profit the qualitative form of profit of enterprise, and, further on, of wages of superintendence. The specific functions, which the capitalist as such has to perform, and which precisely differentiate him from the laborer and bring him into opposition to the laborer, are presented as mere functions of labor. He creates surplus-value, not because he performs *the work of a capitalist,* but because he *also* works aside from his capacity as a capitalist. This portion of surplus-value is thus no longer surplus-value, but its opposite, an equivalent for labor performed. Owing to the fact that the estranged character of capital, its antagonism to labor, has been relegated to a place outside of the actual process of exploitation, namely to the interest-bearing capital, this process of exploitation itself appears as a simple labor process, in which the exploiting capitalist performs merely a different kind of labor than the laborer. In this way the labor of exploitation and the exploited labor both appear as labor, as identical. The labor of exploitation is labor just as well as the labor which is exploited. It is the interest which represents the social form of capital, but it does so in a neutral and indifferent way. It is the profit of enterprise which represents the economic function of capital, but it does so in a way, which takes no cognizance of the definite capitalist character of this function.

In the present case, what passes in the consciousness of the capitalist is quite similar to what passes in the case of the fluctuations for which the capitalist makes allowance in the equalisation of the average profits, as indicated in part II of this volume. These compensating causes, which exert a determining influence on the distribution of the surplus-value, are distorted by the capitalist conception into originating causes and subjective justifications of profit itself.

The conception of profit of enterprise in the shape of wages of superintendence of labor, arising from the antagonism of

profit of enterprise to interest, is further strengthened by the fact, that a portion of the profit may indeed be separated, and is separated in reality, as wages, or rather the reverse, that a portion of the wages appear under capitalist production as a separate portion of the profit. Already Adam Smith indicated, that this portion assumes its pure form, independently of profit and wholly separated from it (as the sum of interest and profit of enterprise), and likewise separated from that portion of the profit, which remains in the shape of profit of enterprise after the deduction of the interest, in the salary of the superintendent in those lines of business, whose size, etc., permits a sufficient division of labor to justify a special salary for the labor of a superintendent.

The labor of superintendence and management will naturally be required whenever the direct process of production assumes the form of a combined social process, and does not rest on the isolated labor of independent producers.[74] It has, however, a double nature.

On one side, all labors, in which many individuals cooperate, necessarily require for the connection and unity of the process one commanding will, and this performs a function, which does not refer to fragmentary operations, but to the combined labor of the workshop, in the same way as does that of a director of an orchestra. This is a kind of productive labor, which must be performed in every mode of production requiring a combination of labors.

On the other side, quite apart from any commercial department, this labor of superintendence necessarily arises in all modes of production, which are based on the antagonism between the laborer as a direct producer and the owner of the means of production. To the extent that this antagonism becomes pronounced, the role played by superintendence increases in importance. Hence it reaches its maximum in the slave system.[75] But it is indispensable also under the

[74] "Superintendence is here (in the case of the farm owner) completely dispensed with." (J. E. Cairnes, *The Slave Power*, London, 1862, p. 48.)

[75] "If the nature of the work requires that the workmen (namely the slaves) should be dispersed over an extended area, the number of overseers, and, therefore, the cost of the labor which requires this supervision, will be proportionately increased." (Cairnes, l. c., p. 44.)

capitalist mode of production since then the process of production is at the same time the process by which the capitalist consumes the labor-power of the laborer. In like manner, the labor of superintendence and universal interference by the government in despotic states comprises both the performance of the common operations arising from the nature of all communities and the specific functions arising from the antagonism between the government and the mass of the people.

In the works of ancient writers, who have the slave system under their eyes, both sides of the labor of superintendence are as inseparably combined in theory as they were in practice. So it is also in the works of the modern economists, who regard the capitalist mode of production as the absolute mode of production. On the other hand, as I shall show immediately by an example, the apologists of the modern slave system utilise the labor of superintendence quite as much to justify slavery, as the other economists do to justify the wage system.

The *villicus* in Cato's time: "At the head of the rural slave community (*familia rustica*) stood the manager (*villicus*, derived from *villa*), who took receipts and made expenditures, bought and sold, received instructions from the master, gave orders and meted out punishment in his absence. . . . The manager occupied naturally a freer position than the other slaves; the Magonian books advise to permit him to marry, raise children, and have his own funds, and Cato recommends that he be married with the female manager; he alone probably had any prospects of being liberated by the master for good behavior. For the rest, all of them formed one common economy. . . . Every slave, including the manager himself, was supplied with his necessities at the expense of his master, in definite periods according to fixed rates, and he had to get along on that. The quantity varied according to labor, and for this reason the manager, whose work was lighter than that of the other slaves, received a smaller ration than the others." (Mommsen, *Römische Geschichte*, second edition, 1856, I, p. 808–810.)

Aristotle: "For the master proves himself such not in the buying, but in the employing of slaves." (The capitalist proves himself such, not by the ownership of capital, which gives him the power to buy labor-power, but in the employment of laborers, nowadays of wage laborers in the process of production.) "But there is nothing great about this knowledge. For whatever the slave must be able to perform, the master must be able to order. Whenever the masters are not compelled to drudge at superintendence, the manager assumes *this honor,* while the masters attend to affairs of state or study philosophy." (Aristotle, *Republic,* Bekker edition, Book I, 7.)

Aristotle says in plain words, that rulership on the political and economic field imposes upon the powers that be the functions of government, and that they must understand the art of consuming labor-power. And he adds, that this labor of superintendence is not a matter of great moment, and that for this reason the master, who is wealthy enough, leaves the "honor" of this drudgery to an overseer.

The labor of management and superintendence arising out of the servitude of the direct producers has often been quoted in justification of this relation, not because it is a function due to the nature of all combined social labor, but because it is due to the antagonism between the owner of means of production and the owner of mere labor-power, regardless of whether this labor-power is bought by buying the laborer himself, as it is under the slave system, or whether the laborer himself sells his labor-power, so that the process of production is the process by which capital consumes his labor-power. And exploitation, the appropriation of the unpaid labor of others, has quite as often been represented as the reward justly due to the owner of capital for his labor. But it was never better defended than it was by a champion of slavery in the United States, a certain lawyer O'Connor, at a meeting held in New York, on December 19th, 1859, under the slogan of "Justice for the South." "Now, Gentlemen," he said amid great applause, "nature itself has assigned this condition of servitude to the negro. He has the strength and is fit to work;

but nature, which gave him this strength, denied him both the intelligence to rule and the will to work. (Applause.) Both are denied to him! And the same nature, which denied him the will to work, gave him a master, who should enforce this will, and make a useful servant of him in a climate, to which he is well adapted, for his own benefit and that of the master who rules him. I assert that it is no injustice to leave the negro in the position, into which nature placed him; to put a master over him; and he is not robbed of any right, if he is compelled to labor in return for this, and to supply a just compensation for his master in return for the labor and the talents devoted to ruling him and to making him useful to himself and to society."

Now, the wage-laborer, like the slave, must have a master, who shall put him to work and rule him. And assuming this relation of master and servant to exist, it is quite proper to compel the wage-laborer to produce his own wages and also the wages of superintendence, a compensation for the labor of ruling and superintending him, "a just compensation for his master in return for the labor and talents devoted to ruling him and to making him useful to himself and to society."

The labor of superintendence and management arising out of the antagonistic character and rule of capital over labor, which all modes of production based on class antagonisms have in common with the capitalist mode, is directly and inseparably connected, also under the capitalist system, with those productive functions, which all combined social labor assigns to individuals as their special tasks. The wages of an *epitropos,* or *régisseur,* as he used to be called in feudal France, are entirely differentiated from the profit and assumes the form of wages for skilled labor, whenever the business is operated on a sufficiently large scale to warrant paying such a manager, although our industrial capitalists do not "attend to affairs of state or study philosophy" for all that.

That not the industrial capitalists, but the industrial managers are "the soul of our industrial system," has already

been remarked by Mr. Ure.[76] So far as the commercial part of the business is concerned, we have said as much as was necessary in the preceding part of this volume.

The capitalist mode of production itself has brought matters to such a point, that the labor of superintendence, entirely separated from the ownership of capital, walks the streets. It is, therefore, no longer necessary for the capitalist to perform the labor of superintendence himself. A director of an orchestra need not be the owner of the instruments of its members, nor is it a part of his function as a director, that he should have anything to do with the *wages* of the other musicians. The co-operative factories furnish the proof, that the capitalist has become just as superfluous as a functionary in production as he himself, in his highest developed form, finds the great real estate owner superfluous. To the extent that the labor of the capitalist is not the purely capitalistic one arising from the process of production and ceasing with capital itself, to the extent that it is not limited to the function of exploiting the labor of others, to the extent that it rather arises from the social form of the labor-process as a combination and co-operation of many for the purpose of bringing about a common result, to that extent it is just as independent of capital as that form itself, as soon as it has burst its capitalistic shell. To say that this labor as a capitalistic one, as a function of the capitalist is necessary, amounts merely to saying that the vulgar economist cannot conceive of the forms developed in the womb of capitalist production separated and freed from their antagonistic capitalist character. Compared to the money-capitalist the industrial capitalist is a laborer, but a laboring capitalist, an exploiter of the labor of others. The wages which he claims and pockets for this labor amount exactly to the appropriated quantity of another's labor and depend directly upon the rate of exploitation of this labor, so far as he takes the trouble to assume the necessary burdens of exploitation. They do not depend

[76] A. Ure, *Philosophy of Manufactures*, French translation, 1836, I, p. 68, where this Pindarus of the manufacturers at the same time testifies that most of the manufacturers have not the slightest understanding of the mechanism, which they set in motion.

upon the degree of his exertions in carrying on this exploitation. He can easily shift this burden to the shoulders of a superintendent for moderate pay. After every crisis one may see plenty of ex-manufacturers in the English factory districts, who for low wages superintend their own former factories as managers of the new owners, who are frequently their creditors.[77]

The wages of superintendence, both for the commercial and the industrial manager, appear completely separated from the profits of enterprise in the co-operative factories of the laborers as well as in capitalistic stock companies. The separation of the wages of superintendence from the profits of enterprise, which is at other times accidental, is here constant. In the co-operative factory the antagonistic character of the labor of superintendence disappears, since the manager is paid by the laborers instead of representing capital against them. Stock companies in general, developed with the credit system, have a tendency to separate this labor of management as a function more and more from the ownership of capital, whether it be self-owned or borrowed. In the same way the development of bourgeois society separates the functions of judges and administrators from feudal property, whose prerogatives they were in feudal times. Since the mere owner of capital, the money-capitalist, has to face the investing capitalist, while money-capital itself assumes a social character with the advance of credit, being concentrated in banks and loaned by them instead of by its original owners, and since, on the other hand, the mere manager, who has no title whatever to the capital, whether by borrowing or otherwise, performs all real functions pertaining to the investing capitalist as such, only the functionary remains and the capitalist disappears from the process of production as a superfluous person.

From the public accounts of the co-operative factories in

[77] In one case known to me, after the crisis of 1868, a bankrupt manufacturer became the paid wage-laborer of his own former employes. This factory was operated after the bankruptcy of its owner by a laborers' co-operative, and its former owner was employed as manager.— F. E.

England [78] it is manifest, that the profit, after the deduction of the wages of the superintendent, which form a part of the invested capital the same as the wages of the other laborers, was higher than the average profit, although they paid occasionally a much higher interest than the private factories. The cause of the greater profit was in all these cases a greater economy in the use of constant capital. What interests us particularly here is the fact that here the average profit (= interest + profit of enterprise) presents itself actually and palpably as a magnitude, which is wholly separated from the wages of superintendence. Since the profit was here higher than the average profit, the profit of enterprise was also higher than the current one.

The same fact is revealed by some capitalist stock companies, such as joint stock banks. The London and Westminster Bank paid in 1863 annual dividends of 30%, the Union Bank of London and others 15%. Aside from the salary of the director, the interest paid for deposits is here deducted from the gross profit. The high profit is explained in this case by the small proportion of the paid-up capital to the deposits. For instance, in the case of the London and Westminster Bank, it was in 1863: Paid-up Capital 1,000,000 pounds sterling; deposits 14,540,275 pounds sterling. In that of the Union Bank of London, 1863: Paid-up capital 600,000 pounds sterling; deposits 12,384,173 pounds sterling.

The confounding of the profit of enterprise with the wages of superintendence or management was due originally to the antagonistic form assumed toward interest by the surplus over the interest. It was further promoted by the apologetic intention to represent profit, not as a surplus-value derived from unpaid labor, but as wages of the capitalist himself for labor performed by him. This was met on the part of the socialists by the demand, that profit should actually be reduced to what it pretended to be theoretically, namely mere wages of superintendence. And this demand was all the more disagreeable to the apologists of the capitalists, as these wages

[78] The accounts quoted here go no farther than 1864, since the above was written in 1865.— F. E.

of superintendence, like all other wages, found on one hand their level and fixed market-price to the extent that a numerous class of industrial and commercial superintendents was formed,[79] while on the other hand these wages fell, like all wages for skilled labor, with the general development, which reduces the cost of production of specifically trained labor-power.[80] With the development of co-operation on the part of the laborers, of stock enterprises on the part of the bourgeoisie, even the last pretext for the confusion in matters of profit of enterprise and wages of management was removed, and profit appeared also in practice what it was undeniably in theory, mere surplus-value, a value for which no equivalent was paid, realised unpaid labor. It was then seen that the investing capitalist really exploits labor, and that the fruit of his exploitation, when he worked with a borrowed capital, was divided into interest and profit of enterprise, a surplus of profit over interest.

On the basis of capitalist production, a new swindle develops in stock enterprises with the wages of management. It consists in placing above the actual director a board of managers or directors, for whom superintendence and management serve in reality only as a pretext for plundering stockholders and amassing wealth. Very interesting details concerning this are found in "*The City or the Physiology of London Business; with Sketches on 'Change, and the Coffee Houses,* London. 1845." Here is a sample: "What bankers and merchants gain by being on the boards of eight or nine different companies, may be seen from the following illustration: The private account of Mr. Timothy Abraham Curtis, handed in by the court of bankruptcy on his failure,

[79] "Masters are laborers as well as their journeymen. In this character their interest is precisely the same as of their men. But they are also either capitalists, or the agents of capitalists, and in this respect their interest is decidedly opposed to the interest of the workmen." (P. 27.) "The wide spread of education among the journeymen mechanics of this country diminishes daily the value of the labor and skill of almost all masters and employers by increasing the number of persons who possess their peculiar knowledge." (P. 30, Hodgskin, *Labor defended against the Claims of Capital,* etc., London, 1825.)

[80] "The general relaxation of conventional barriers, the increased facilities of education tend to bring down the wages of skilled labor instead of raising those of the unskilled." (J. St. Mill, *Principles of Political Economy,* 2nd ed., London, 1849, I, p. 463.)

showed an income of 8,900 pounds sterling per year under the head of directorships. Since Mr. Curtis had been a director of the Bank of England and of the East Indian Company, every stock company was happy to secure him as a director." (P. 82.) — The remuneration of the directors of such companies for each weekly meeting is at least one guinea. The proceedings of the court of bankruptcy show, that these wages of superintendence are as a rule inversely proportioned to the actual superintendence performed by these nominal directors.

CHAPTER XXIV.

EXTERNALISATION OF THE RELATIONS OF CAPITAL IN THE FORM OF INTEREST-BEARING CAPITAL.

In the interest-bearing capital, the relations of capital assume their most externalised and most fetish-like form. We have here M — M′ money creating more money, self-expending value, without the process intermediate between these two extremes. In the merchants' capital, M — C — M′, there is at least the general form of the capitalistic process, although it clings to the sphere of circulation, so that profit appears merely as profit from selling; but it is at least seen to be the product of a *social relation*, not the product of a mere *thing*. The form of merchants' capital presents at least the aspect of a process, of a unity of antagonistic phases, of a movement divided into two transactions, namely into the purchase and sale of commodities. This is obliterated in M — M′, the form of interest-bearing capital. For instance, if 1,000 pounds sterling are loaned by some capitalist, when the rate of interest is 5%, then the value of 1,000 pounds sterling as a capital for one year is C + Ci′, C standing for the capital and i′ for the rate of interest. In the present case this would mean 5%, or $\frac{5}{100}$ or $\frac{1}{20}$, and 1,000 + 1,000 times $\frac{1}{20}$ = 1,050 pounds sterling. The value of 1,000 pounds sterling as capital is 1,050 pounds sterling, that is, capital is not a simple magnitude. It is a *relation of mag-*

nitudes, a relation of principal sum, as a given value, to itself as a self-expanding value, as a principal sum having produced a surplus-value. And we have seen that capital assumes this form of a directly self-expanding value for all investing capitalists, whether they work with their own or with a borrowed capital.

M — M′. We have here the original starting point of capital, we have money in the formula M — C — M′ reduced to its two extremes M — M′, in which M′ stands for M + increment of M, money creating more money. It is the primal and general formula of capital concentrated into a meaningless summary. It is capital perfected, a unity of the process of production and process of circulation, yielding a certain surplus-value in a certain period of time. In the form of interest-bearing capital this appears spontaneously without any intervention of the processes of production and circulation. Capital appears as a mysterious and self-creating source of interest, a thing increasing itself. The *Thing* (money, commodity, value) is now capital even as a mere thing, and capital appears as a mere thing. The result of the entire process of reproduction appears as a faculty inherent in the thing itself. It depends on the owner of the money, which represents the universal exchange-form of commodities, whether he wants to spend it as money or loan it as capital. In the interest-bearing capital, therefore, this automatic fetish is elaborated in its pure state, it is self-expanding value, money generating money, and in this form it does not carry any more scars of its origin. The social relation is perfected into the relation of a thing, of money, to itself. Instead of the actual transformation of money into capital, only an empty form meets us here. As in the case of labor-power, so here in the case of interest-bearing capital the use-value of money becomes that of creating value, and at that a greater value than it contains itself. Money as such is potentially self-expanding value and is loaned as such, and loaning is the form of sale for this peculiar commodity. It becomes a faculty of money to generate value and yield interest, just as it is a faculty of a pear tree to bear pears. And the money

lender sells his money as such an interest-bearing thing. But that is not all. The actually invested capital, as we have seen, presents itself in such a light, that it seems to yield the interest, not as a capital performing its function, but as a capital in itself, as money-capital.

And still something else becomes perverted. While interest is only a portion of the profit, that is, of surplus-value, which the investing capitalist squeezes out of the laborer, it looks now on the contrary as though the interest were the typical fruit of capital, the primal thing, and profit, in the shape of profit of enterprise, a mere accessory and by-product of the process of reproduction. Thus the fetish form of capital and the conception of a fetish capital are perfect. In M — M′ we have the void form of capital, the perversion and individualisation of the relations of production in their highest degree. The interest-bearing form is the simple form of capital, in which it is assumed to be antecedent to its own process of reproduction. It is the faculty of money, or of a commodity, to expand its own value independently of reproduction, a mystification of capital in its most flagrant form.

For vulgar political economy, which desires to represent capital as a spontaneous source of value and its creation, this mystic form is, of course, a great boon. It is a form, in which the source of profit is no longer discernible, and in which the result of the capitalist process of production receives an independent existence apart from this process.

It is not until capital becomes money-capital, that it can assume the form of a commodity, whose self-expanding faculty has a definite price, which is quoted in the current rate of interest.

As an interest-bearing capital, in its direct form of interest-bearing money-capital (the other forms of interest-bearing capital, which do not concern us here, are derived from this one and require its existence), capital assumes its pure fetish form, M — M′ as a subject and a saleable thing. In the first place, its continual existence as money gives to it a form, in which all its functions are obliterated and its real elements

invisible. For money is precisely that form, in which the distinctions of commodities as use-values are concealed, and with them the distinctions of the industrial capital consisting of these commodities and their conditions of production. It is that form, in which value, in the present case capital, exists as an independent exchange-value. In the process of reproduction of capital, the money-form is but a transient one, a mere passing link. But on the money-market, capital always exists in this form. In the second place, the surplus-value produced by it, which has here again the form of money, appears as inherent in it. Like the growing of trees, so the breeding of money appears as an innate quality of capital in the form of money-capital.

In the interest-bearing capital, the movement of capital is contracted. The intervening process is omitted. In this way a capital of 1,000 appears with the fixed faculty of being of itself 1,100 and converting itself after a certain period into 1,100, just as wine in a cellar improves its use-value after a certain period. Capital is then a thing, which is of itself capital. The money is then pregnant. As soon as it has been loaned, or invested in the process of reproduction (when it yields interest to its owner separate from profit of enterprise for his function as investing capitalist), the interest accumulates, whether it be awake or asleep, at home or abroad, day or night. In the interest-bearing money capital, then, the fervent wish of the hoarding miser is fulfilled (and all capital is money-capital, so far as the expression of its value is concerned, or is considered as the expression of money-capital).

It is this inherent dwelling of interest in money-capital as a thing (and this is the aspect here assumed by the production of surplus-value by capital), which engages Luther's attention so much in his naive thundering against usury. After demonstrating, that interest may be demanded, when failure to pay back a loan to a lender, who has to meet a certain payment himself, caused a loss to him, or when he might have made a profit on a bargain, for instance in buying a garden, but lost it for the reason that the borrower failed to return

the loan on time, Luther continues: "Now that I have loaned you 100 guilders, you make good my double loss due to the fact that I could not pay on one side and not buy on the other, so that I had to lose on both sides, and this is called double interest, for loss sustained and gain stopped. . . . Having heard that John lost on his loan of 100 guilders and demands just damages, they rush in and charge double interest on every 100 guilders, which interest was only charged for the loss due to nonpayment and to inability to make a profit on a bargain, *just as though every 100 guilders could naturally grow double interest,* so that whenever they have 100 guilders, they loan them out and charge for two losses, which they have not at all sustained. . . . Therefore you are a usurer, who takes damages out of his neighbor's money for an imaginary loss that you did not sustain at all, and which you can neither prove nor calculate. This sort of loss is called by the jurists *not true, but fantastical interest.* It is a loss of which each dreams for himself. . . . It will not do to say that you might incur a loss, because I might not have been able to pay or buy. That would be making something out of a thing that is not so, a thing that is uncertain into a thing that is absolutely sure. Such usury would eat up the world in a few years. . . . If the lender accidentally incurs a loss, without his fault, he may demand damages for it, but it is different in trade and just the reverse. There they scheme to profit at the expense of their needy neighbors, how to amass wealth and get rich, to be lazy and idle and live in luxury on the labor of others, without any care, danger and loss. To sit behind the stove and let my 100 guilders gather wealth for me in the country and yet keep them in my pocket, because they are only loaned, without any danger or risk, my friend, who would not like to do that!" (Martin Luther, *An die Pfarherrn wider den Wucher zu predigen, etc.,* Wittenberg, 1540.)

The idea of capital as a self-reproducing and thereby self-expanding value, lasting and growing eternally by virtue of its inherent power — by virtue of the hidden faculties of the scholastics — has led to the fabulous fancies of Dr. Price,

which far outdo the fantasies of the alchemists; fancies, in which Pitt seriously believed and which he used as pillars of his financial administration in his laws concerning the sinking fund.

"Money bearing compound interest grows at first slowly; but since the rate of increase is constantly accelerated, it becomes so fast after a while as to defy all imagination. A penny, loaned at the birth of our Savior at compound interest at 5%, would already have grown into a larger amount than would be contained in 150 million globes, all of solid gold. But loaned at simple interest, it would have grown only to 7 sh. 4½ d. in the same time. Hitherto our government has preferred to improve its finances in the latter instead of in the former way." [81]

He flies still higher in his "*Observations on Reversionary Payments*, etc., London, 1782." There we read: "1 sh. invested at the birth of our Savior" (presumably in the Temple of Jerusalem) "at 6% compound interest would have grown to a larger amount than the entire solar system could contain, if it were transformed into a globe of the diameter of the orbit of Saturn." "A state need never to be in difficulties on this account; for with the smallest savings it can pay the largest debt in as short a time as its interests may

[81] Richard Price, *An Appeal to the Public on the subject of the National Debt*, 2nd ed., London, 1772. He cracks the naive joke: "A man must borrow money at simple interest, in order to increase it at compound interest." (R. Hamilton, *An Inquiry into the Rise and Progress of the National Debt of Great Britain*, 2nd ed., Edinburgh, 1814.) According to this, borrowing would be the safest means for private people to gather wealth. But if I borrow 100 pounds sterling at 5% annual interest, I have to pay 5 pounds at the end of the year, and even if the loan lasts for 100 million years, I have meanwhile only 100 pounds to loan every year and 5 pounds to pay every year. I can never manage by this process to loan 105 pounds sterling when borrowing 100 pounds sterling. And how am I going to pay the 5 pounds? By new loans, or, if it is the state, by new taxes. Now, if the industrial capitalist borrows money, and his profit amounts to 15%, he may pay 5% interest, spend 5% for his private expenses (although his appetite grows with his income), and capitalise 5%. In this case, 15% are the premise on which 5% interest may be paid continually. If this process continues, the rate of profit, for the reasons indicated in former chapters, will fall from 15% to, say, 10%. But Price forgets wholly that the interest of 5% presupposes a rate of profit of 15%, and assumes it to continue with the accumulation of capital. He does not take note of the process of accumulation at all, but thinks only of the loaning of money and its return with compound interest. How that is accomplished is immaterial to him, since for him it is the innate faculty of interest-bearing capital.

demand." (P. 136.) What a pretty theoretical introduction to the national debt of England!

Price was simply dazzled by the enormousness of the figures arising from geometrical progression. Since he regarded capital, without taking note of the conditions of reproduction and labor, as a self-regulating automaton, as a mere number increasing itself (just as Malthus did with men in their geometrical progression), he could imagine that he had found the law of its growth in the formula $s = c(1 + i)^n$, in which s stands for the sum of capital plus compound interest, c for the advanced capital, i for the rate of interest expressed in aliquot parts of 100, and n for the number of years in which this process takes place.

Pitt takes this mystification of Price quite seriously. In 1788 the House of Commons had resolved to raise one million pounds sterling for the public benefit. According to Price, in whom Pitt believed, there was, of course, nothing better than to tax the people, in order to "accumulate" this sum after raising it, and thus to spirit the national debt away by the mystery of compound interest. "The above resolution of the House of Commons was soon followed up by Pitt with a law, which ordered the accumulation of 250,000 pounds sterling, until, with the expired annuities, the fund should have grown to 4,000,000 pounds sterling annually." (Act 26, George III, chap. 22.) In his speech of 1792, in which Pitt proposed that the amount devoted to the sinking fund be increased, he mentioned among the causes of the commercial supremacy of England machines, credit, etc., as "the most wide-spread and enduring cause of accumulation." This principle, he said, was completely developed in the work of Smith, that genius, etc. . . . And this accumulation, he continued, was accomplished by laying aside at least a portion of the annual profit for the purpose of increasing the principal, which was to be employed in the same manner next year, and which thus yielded a continual profit. By the help of Dr. Price, Pitt thus converted Smith's theory of accumulation in an increase of popular wealth by means of the accumulation of debts, and in this way he gets into the pleas-

ant progress of infinite loans, made for the purpose of paying loans.

Already Josiah Child, the father of modern banking, tells us that 100 pounds sterling at 10% will produce in 70 years by compound interest 102,400 pounds sterling. *Traité sur le commerce,* etc., par J. Child, traduit, etc., Amsterdam et Berlin, 1754, p. 115. Written in 1669.)

How thoughtlessly the conception of Dr. Price is applied by modern economists, is shown by the following passage of the "*Economist*": "Capital, with compound interest on every portion of capital saved, is so all-engrossing that all the wealth in the world from which income is derived, has long ago become interest of capital . . . . all rent is now the payment of interest on capital previously invested in the land." (*Economist,* July 19th, 1859.) In its capacity of interest-bearing capital capital claims the ownership of all wealth which can ever be produced, and everything it has received so far is but an instalment for its all-engrossing appetite. By its innate laws, all surplus-labor belongs to it, which the human race can ever perform. Moloch.

In conclusion we present the following hodge-podge of the romantic Müller: "Dr. Price's immense increase of compound interest, or of the self-accelerating forces of man, presuppose an undivided or unbroken order for several centuries, if they are to produce such enormous effects. As soon as capital is divided, cut up into several independently growing slips, the total process of accumulating forces begins anew. Nature has distributed the progression of power over a course of about 20 to 25 years, which fall on an average to the share of every laborer (!). After the lapse of this time the laborer leaves his track and must transfer the capital accumulated by the compound interest of labor to a new laborer, having to distribute it as a rule among several laborers or children. These must first learn to vitalise and employ their share of capital, before they can draw any actual compound interest out of it. Furthermore, an enormous quantity of capital gained by bourgeois society is accumulated for many years, even in the most restless communities, and is not employed

for any immediate expansion of labor, but rather entrusted to another individual, a laborer, a bank, a state, under the term of a loan, whenever a considerable amount has been gathered together. And in that case the one who receives it sets the capital into actual motion and draws compound interest out of it, so that he can easily agree to pay simple interest to the lender. Finally the laws of consumption, greed, waste, oppose those immense progressions, in which the forces of man and their products might increase, if the law of production or thrift were alone effective." (A Müller, l. c., II, p. 147–149.)

It is impossible to concoct a more hair-raising nonsense in a few lines. Leaving aside the droll confusion of laborer and capitalist, of value of labor-power and interest of capital, etc., the decrease of compound interest is supposed to be explained by lending capital at compound interest. This procedure of our Müller is characteristic of romanticism in all fields. It is made up of current prejudices, skimmed from the most superficial semblance of things. This false and trivial substance is then supposed to be "uplifted" and rendered poetical by a mystifying mode of expression.

The process of accumulation of capital may be conceived as an accumulation of compound interest in the sense that that portion of the profit (surplus-value), which is reconverted into capital, and serves to absorb more surplus-value, may be called interest. But

1) Aside from all accidental irregularities, a large part of the available capital is continually depreciated in the course of the process of reproduction, because the value of the commodities is not determined by the labor-time originally spent in their production, but by the labor-time spent in their reproduction, and this decreases continually in consequence of the development of the productivity of social labor. On a higher stage of development of the social productivity all available capital appears therefore as the result of a relatively short time of reproduction, instead of as the result of a long process of saving capital.[82]

[82] See Mill and Carey, and Roscher's mistaken commentary on them.

2) As we have proven in Part III of this volume, the rate of profit decreases in proportion as the accumulation of capital and the productivity of social labor corresponding to it increase, since these two express themselves precisely in a relative and progressive decrease of the variable portion of capital as compared to the constant. In order to produce the same rate of profit, when the constant capital set in motion by one laborer increases tenfold, the surplus labor time would have to increase tenfold, and soon the total labor time, and finally the full 24 hours of a day, would not suffice, even if wholly appropriated by capital. The idea that the rate of profit does not decrease is, on the other hand, the basis of the progression of Price, as it is in general the basis of "all-engrossing capital with compound interest." [83]

By the identity of surplus-value with surplus-labor a qualitative limit is imposed upon the accumulation of capital. This is formed by the total working day, the prevailing development of the productive forces and of the population, which limit the number of the simultaneously exploitable working days. But if surplus value is conceived of in the meaningless form of interest, then the limit is merely quantitative and defies all fantasy.

Now, in the interest-bearing capital the idea of a capitalist fetish is perfected, the idea, which attributes to the accumulated product of labor, and at that in the fixed form of money, the power of creating surplus-value by its inherent secret qualities, in a purely automatic manner, and in geometrical progression, so that the accumulated product of labor, as the "*Economist*" thinks, has long discounted all the wealth of the world for all times as belonging to it and coming to it by right. The product of past labor, the past labor itself, is here pregnant in itself with a portion of present or future living surplus-labor. We know, on the contrary, that as a matter of fact the preservation, and to that extent

[83] "It is clear, that no labor, no productive power, no ingenuity, and no art, can answer the overwhelming demands of compound interest. But all saving is made from the revenue of the capitalist, so that actually these demands are constantly made and as constantly the productive power of labor refuses to satisfy them. A sort of balance is, therefore, constantly struck." (*Labour defended against the Claims of Capital*, p. 23. By Hodgskin.)

the reproduction, of the value of the products of past labor is *only* the result of their contact with living labor; and secondly, that the control exerted by the products of past labor over living surplus-labor lasts only as long as the relations of capital, which rest on the definite social relation, in which past labor dominates independently over living labor.

CHAPTER XXV.

CREDIT AND FICTITIOUS CAPITAL.

An exhaustive analysis of the credit system and of the instruments created by it for its own use (credit money, etc.) is beyond the scope of our plan. We merely wish to dwell here upon a few particular points, which are necessary for a characterisation of the capitalist mode of production in general. To this end we shall deal only with commercial and bank credit. The connection between the development of this form of credit and that of public credit is not considered here.

I have shown previously (in volume I, chapter III, 3 b.), in what manner the function of money as a medium of payment, and consequently a relation of creditors and debtors, is formed among the producers of commodities and the traders, as the outcome of the simple circulation of commodities. With the development of commerce and of the capitalist mode of production, which has an eye only to the circulation, this natural basis of the credit system is extended, generalised, elaborated. Money serves here on the whole merely as a means of payment, that is to say, commodities are not sold for money, but for a written promise to pay for them at a certain date. We may comprise all these promises to pay for brevity's sake under the general category of bills of exchange. Such bills of exchange in their turn circulate as means of payment until the day on which they fall due; and they form commercial money in the strict meaning of the term. To the extent that they ultimately balance one another by the compensation of credits and debts, they serve abso-

lutely as money, since no transformation into actual money takes place. Just as these mutual advances of the producers and merchants to one another form the real foundation of credit, so their instrument of circulation, the bill of exchange, forms the basis of credit money proper, of bank notes, etc. These do not rest upon the circulation of money, whether it be metallic money or government paper money, but upon the circulation of bills of exchange.

W. Leatham, a banker of Yorkshire, writes in his "*Letters on the Currency,*" 2nd edition, London, 1840: "I find, that the total amount in bills of exchange for the entire year 1839 was 528,493,842 pounds sterling" (he assumed that the foreign bills of exchange composed about one-fifth of the whole) "and the amount of bills of exchange simultaneously current in the same year to 132,123,460 pounds sterling" (p. 56). "The bills of exchange make up a greater part of the amount in circulation than all the rest together" (p. 3). "This enormous superstructure of bills of exchange rests (!) upon a basis formed by the amount of bank notes and gold; and if in the course of events this basis is too much contracted, its solidity, and even its existence, become endangered" (p. 8). "Estimating the entire circulation" (he means of the bank notes) "and the amount of the obligations of all banks for which immediate payment may be demanded, I find a sum of 153 millions, whose conversion into gold might be demanded according to law, and to offset it only 14 millions in gold to satisfy this demand" (p. 11). The bills of exchange cannot be placed under control, unless the superfluity of money and the low rate of interest, or discount, can be prevented, which create a part of them and encourage this dangerous expansion. It is impossible to decide, how much of them is due to actual business, for instance, to real purchases and sales, and what part of them is fictitious and consists only of prolonged bills, that is, when a bill of exchange is drawn for the purpose of taking up a current one before it becomes due, and thus of creating fictitious capital by the manufacture of mere means of circulation. In times of superfluous and cheap money I know this is done to an enor-

mous degree" (p. 43, 44). J. W. Bosanquet, *Metallic, Paper, and Credit Currency,* London, 1842: The average amount of the payments settled on every business day in the Clearing House (where the London bankers mutually exchange the due bills and filed checks) exceeds 3 millions of pounds sterling, and the daily supply of money required for this purpose is little more than 200,000 pounds sterling (p. 86). [In the year 1889, the total turn-over of the Clearing House amounted to 7,618 and ¾ millions of pounds sterling, which, in 300 business days, averages 25 and ½ millions of pounds sterling daily.—F.E.] "Bills of exchange are undoubtedly currency, independent of money, inasmuch as they transfer property from hand to hand by endorsement" (p. 92). "On an average it may be assumed that every circulating bill of exchange bears two endorsements, and that on an average every bill thus performs two payments, before it becomes due. Accordingly it seems that alone by endorsement the bills of exchange promoted a transfer of property to the amount of twice 528 millions, or 1,056 millions of pounds sterling, more than 3 millions daily, in the course of the year 1839. It is, therefore, certain the bills of exchange and deposits together, by transferring property from hand to hand and without the assistance of money, perform the functions of money to a daily amount of at least 18 millions of pounds sterling" (p. 93).

Tooke says the following about credit in general: "Credit, in its simplest expression, is the well or ill-founded confidence, which induces one man to entrust to another a certain amount of capital, in money or in commodities estimated at a certain value, which amount is always payable after the lapse of a definite time. Where the capital is loaned in money, that is, in bank notes, or in a cash credit, or in a check upon some correspondent, an addition of so and so many per cent. upon the returnable amount is made for the use of the capital. With commodities, whose money value has been agreed upon by the parties concerned, and whose transfer constitutes a sale, the stipulated sum, which is to be paid, includes a compensation for the use of the capital

and for the risk assumed until the time of payment. Written agreements to pay on definite days are generally given for such credits. And these transferable obligations, or promises, form the means by which the lenders, when they find an opportunity to use their capital, either in the shape of money or commodities, are generally enabled to borrow or buy more cheaply, their own credit being strengthened by that of the second name upon the bill of exchange." *Inquiry into the Currency Principle,* (p. 87.)

Ch. Coquelin, *Du Crédit et des Banques dans l' Industrie.* Revue des deux Mondes, 1842, tome 31: "In every country the majority of the credit transactions takes place in the circle of the industrial relations themselves . . . the producer of the raw material advances it to the capitalist, who works it up, and receives from him a promise to pay on a certain day. The manufacturer, having completed his share of the work, in his turn advances his product on similar conditions to another manufacturer, who has to manipulate it farther, and in this way credit extends more and more, from one to the other, down to the consumer. The wholesale dealer gives to the retail dealer commodities on credit, while he receives himself credit from a manufacturer or commission agent. All borrow with one hand and lend with the other, sometimes money, but more frequently products. In this manner an incessant exchange of credits, combining and crossing in all directions, takes place in the industrial relations. The development of credit consists precisely in the multiplication and growth of these mutual credits, and here is the real seat of its power."

The other side of the credit system is connected with the development of the money trade, which, of course, keeps step under capitalist production with the development of the trade in commodities. We have seen in the preceding part (chapter XIX), how the care of reserve funds of business men, the technical operations of receiving and issuing money, of international payments, and thus of the bullion trade, are concentrated in the hands of the money traders. Borrowing and lending money becomes their particular business.

They step as middlemen between the actual lender and the borrower of capital. Generally speaking, the banking business on this side consists of concentrating the loanable money-capital in the banker's hands in large masses, so that in place of the individual money lender the bankers face the industrial capitalists and commercial capitalists in the capacity of representatives of all money lenders. They become the general managers of the money-capital. On the other hand, they concentrate the borrowers against all lenders, and borrow for the entire world of commerce. A bank represents on one hand the centralisation of money-capital, of the lenders, and on the other the centralisation of the borrowers. Its profit is generally made by borrowing at a lower rate of interest than it loans.

The loanable capital, of which the banks dispose, flows to them in various ways. In the first place, since they are the cashiers of the industrial capitalists, there is concentrated into their hands the money-capital, which every producer and merchant must have as a reserve fund, or which he receives in payment. These funds are thus converted into loanable capital. In this way the reserve fund of the commercial world, being concentrated into a common treasury, is reduced to its necessary minimum, and a portion of the money-capital, which would otherwise slumber as a reserve fund, is loaned and serves as interest-bearing capital. In the second place, the loanable capital of the banks is formed by the deposits of the money-capitalists, who entrust them with the business of loaning it. Furthermore, with the development of the bank system, and particularly as soon as they pay interest on deposits, the money savings and the temporarily unemployed money of all classes are deposited with them. Small amounts, each by itself incapable of acting in the capacity of money-capital, are combined into large masses and thus form a money power. This aggregation of small amounts must be distinguished as a specific effect of the bank system from its intermediate position between the money-capitalists proper and the borrowers. Finally, the revenues, which are but gradually consumed, are also deposited with the banks.

The loan is made (we refer here only to the commercial credit in the strict meaning of the term) by discounting bills of exchange, that is, by converting them into money before they come due, and by advances in various forms: direct advances on personal credit, Lombard loans on interest bearing papers, government papers, stocks of all kinds, furthermore advances on bills of lading, dock warrants, and other certified titles of ownership in commodities, and by overdrawing on their deposits, etc.

The credit given by a banker may assume various forms, for instance, that of exchanges on other banks, checks on them, opening of credit in the same way, finally, in the case of banks entitled to issue notes, the bank notes of the bank itself. A bank note is nothing but a draft upon the banker, payable at any time to the bearer, and substituted by the banker for private drafts. This last form of credit appears particularly important and striking to the layman, first, because this form of credit money steps from the mere commercial circulation into the general circulation and serves as money there, and in the second place, because in most countries the principal banks issuing notes represent a queer mixture of national and private banks and thus have actually the national credit to back them up and give to their notes the character of a more or less legal tender, for in this case it is apparent, that the thing which the banker handles is credit itself, since a bank note stands only for a circulating token of credit. But the banker also deals in all other forms of credit, even when he advances cash money deposited with him. In fact, a bank note simply represents the coin of wholesale trade, and it is always the deposit, which carries the most weight with banks. The best proof of this is furnished by the Scotch banks.

The special credit institutions, and the particular forms of banks, do not require any further consideration for our purposes.

The banks have a twofold business. . . . 1) To collect capital from those, who have no immediate use for it, and

to distribute it and transfer it to others, who can use it. 2) To receive deposits from the incomes of their customers and to pay them whatever amount they may require of this deposit for the expenses of consumption. The former is circulation of *capital,* the latter circulation of *currency.*— The one is a concentration of capital on one side, and its distribution on the other; the other is a management of the circulation for the local needs of the vicinity.— Tooke, *Inquiry into the Currency Principle,* p. 36, 37.—We shall revert to this passage later, in chapter XXVIII.

Reports of Committees. Vol. VIII., *Commercial Distress.* Vol. II., Part I., 1847–48, *Minutes of Evidence.* (Subsequently quoted as *Commercial Distress,* 1847–48.) In the forties, when discounting bills of exchange in London, bills of exchange of one bank were often drawn on another instead of bank notes. (Testimony of J. Pease, provincial banker, No. 4636 and 4656.) According to the same report, the bankers were in the habit of giving such bills of exchange in payment to their customers, as soon as money grew tight. If the party receiving them demanded bank notes, he had to discount this bill of exchange once more. This amounted to a privilege of making money for the banks. Messieurs Jones, Lloyd and Co., made payments in this way "since time immemorial," as soon as money was scarce and the rate of interest above 5%. The customer was glad to get such banker's bills, because bills of Jones, Lloyd and Co. could be easier discounted than his own; these bills often passed through twenty to thirty hands. (*Ibidem,* No. 901 to 904, 905.)

All these forms serve to make a claim to payments transferable.— There is scarcely one form, which credit may assume, in which it has not at times performed the functions of money; whether this form is that of a bank note, or of a bill, or of a check, the process is essentially the same and the result is essentially the same. Fullarton, *On the Regulation of Currencies,* 2d edition, London, 1845, p. 38.— Bank notes are the small currency of credit. p. 51.—

The following is from J. W. Gilbart. *The History and Principles of Banking,* London, 1834: The capital of a bank consists of two parts, the invested capital and the banking capital, which is borrowed (p. 11 et seq.). The banking capital, or borrowed capital, is maintained in three ways: 1)

through the acceptance of deposits; 2) through the issuing of the bank's own notes; 3) through the drawing of bills. If some one is willing to loan me 100 p.st. for nothing, and I loan these 100 p.st. to some one else at 4%, I shall make 4 p.st. by this transaction in the course of one year. Likewise if some one is willing to accept my promise to pay and to return it to me at the end of the year and to pay me 4% for it, just as though I had given him 100 p.st. by this transaction, I make 4 p.st. by it; and again, if a man in a country town brings me 100 p.st. on the condition that I shall pay this amount to some third person in London after the lapse of 21 days, all the interest I may draw in the meantime on this money will be my profit. This is an objective summary of the operations of a bank and of the way in which a banking capital is created by deposits, bank notes and bills of exchange (p. 117). The profits of a banker are generally proportionate to the amount of his borrowed or banking capital. In order to determine the actual profit of a bank, the interest on the first investment of capital must be deducted from the gross profits. The remainder is the banking profit (p. 118). *The advances of a banker to his customers are made with the money of other people (p. 146).* Precisely those bankers, who do not issue any bank notes, create a banking capital by discounting bills of exchange. They increase their deposits by their discounting operations. The London banks discount only for those firms, that keep a deposit in account with them (p. 119). A firm discounting bills of exchange in its bank and having paid interest upon the whole amount of these bills must leave at least a portion of this amount in the hands of the bank without receiving any interest on it. In this way the banker receives a higher rate of interest than the current one on the advanced money and creates for himself a banking capital by means of the surplus remaining in his hands. (p. 120.) — Economising of reserve funds, deposits, checks: The deposit banks economise by a transfer of credit accounts the use of the circulating medium and transact business of a large volume with a small amount of actual money. The money thus released is employed by the banker in making advances to his customers by means of discounts, etc. Hence the transfer of credit enhances the effectiveness of the deposit system (p. 123). It is immaterial, whether the two customers, that

deal with one another, keep their accounts with the same or with different bankers. For the bankers exchange their checks among themselves in the Clearing House. By means of transfers the deposit system might be extended to such a degree that it would do away entirely with the use of metal money. If every one were to keep a deposit account in the bank and to make payments by means of checks then such checks would be the only circulating medium. In this case the assumption would have to be that the bankers hold the money in their hands, otherwise the checks would have no value (p. 124). The centralisation of the local transactions in the hands of the banks is promoted, 1) by branch banks. The provincial banks have branch establishments in the smaller towns of their district the London banks in the different quarters of the city. 2) By agencies. Every provincial bank has its agent in London, in order to pay its notes or bills there and to receive money, which is paid down by inhabitants of London for the account of people living in the provinces. (p. 127.) Every banker gathers in the notes of the others and holds them. In every large city they meet once or twice a week and exchange their notes. The balance is paid by a check on London. (p. 134.) The purpose of banks is to facilitate business. Whatever facilitates business, facilitates also speculation. Business and speculation are so closely linked in some cases, that it is difficult to tell where business stops and speculation begins. Wherever there are banks, capital can be obtained more easily and cheaply. The cheapness of capital promotes speculation, just as the cheapness of beer and meat promotes gluttony and drunkenness (p. 137, 138). Since the banks issuing their own notes always pay in these notes, it may seem as though their discount business were transacted exclusively with the capital made in this way, but this is not so. A banker may very well pay all the bills discounted by him with his own notes, and yet nine-tenths of the bills in his possession may represent actual capital. For while he may have given only his own paper money for these bills, it need not stay in the circulation until these bills become due. The bills may be running for three months, while the notes may return in three days. (p. 172.) The overdrawing of accounts by customers a regular business practice. This is indeed the purpose, for which cash credit is granted. Cash credits are

not granted on personal security, but on deposit of collateral papers (p. 174, 175). A capital advanced on bonded wares has the same effect as though it had been advanced in discounting bills. If a man borrows 100 p.st on his goods as a security, it is the same as though he had sold them for a bill of exchange of 100 p.st. and discounted this bill with his banker. But this advance enables him to hold his goods over for a better condition of the market and to avoid sacrifices, which he would have had to make, in order to obtain money for urgent purposes (p. 180, 181).

The *Currency Question Reviewed,* etc., p. 62, 63: It is here indisputably true that the 1,000 p.st. which I deposit to-day with A are issued to-morrow and deposited with B. The day after to-morrow it may be issued once more by B and form a deposit with C, and so forth infinitely. The same 1,000 p.st. of money may, therefore, multiply themselves into an absolutely indeterminable sum of deposits by a series of transfers. *Hence it is possible that nine-tenths of all deposits in England may have no other existence but that in the entries of the banker's books,* of whom every one stands good for his part of them. In Scotland, for instance, the money in circulation (and mostly paper money at that) never exceeds 3 million p.st., while the deposits amount to 27 millions. So long as no general and sudden demand is made for the return of the deposits (a run on the bank), the same 1,000 p.st., traveling backward, may balance an equally indeterminable sum with the same facility. Since the same 1,000 p.st., with which I balance to-day my debt with some business man, may balance to-morrow his debt with some other business man, and the day after to-morrow balance this man's account, and so forth infinitely, it follows that the same 1,000 p.st. may pass from hand to hand and from bank to bank and balance any imaginable sum of deposits.

[We have seen, that Gilbart knew even in 1834 that "whatever facilitates business facilitates speculation, both being so intimately linked in many cases, that it is difficult to tell, where business stops and speculation begins." If the securing of advances on unsold commodities is facilitated more and more, then more and more of such advances are taken, and

in the same proportion increases the temptation to manufacture commodities, or throw already manufactured ones upon distant markets, for no other immediate purpose than that of obtaining advances of money on them. To what extent the entire business world of a country may be seized by such a swindle, and what it finally comes to, may be studied in the history of English business during the years 1845 to 1847, which furnishes a flagrant example. There we can see what credit can accomplish. Before we mention some of the most conspicuous cases, we must make a few preliminary remarks.

About the close of 1842 the pressure, which had crushed English industry almost without interruption since 1837, began to weaken. During the following two years the demand of the foreign countries for products of English industry increased still more. The year 1845 to 1846 marked the period of greatest prosperity. In 1843 the opium war had opened the doors of China to English commerce. The new market offered a convenient excuse for the further expansion of already extended industries, particularly of the cotton industry. "How can we ever produce too much? We have to clothe 300 millions of people." Thus spoke a Manchester manufacturer to the writer in those days. But all the newly erected factory buildings, steam engines, spinning and weaving machines did not suffice to absorb the surplus-value, which poured into them from Lancashire. With the same passion, which was exhibited in the expansion of production, the building of railroads was undertaken. Here the longing of manufacturers and merchants for speculation found its first satisfaction, as early as the summer of 1844. Stock was underwritten to the full extent possible, that is, so far as the money went to cover the first payments. The idea was that a way would be found in due time to get the missing amount. But when further payments were due (Question 1059, C. D. 1848–57, indicates that the capital invested in railroads in 1846–47 amounted to 75 million p.st.), it was necessary to resort to credit, and as a rule the actual business of the firm itself had to add its drop of blood.

In most cases the actual business was already overburdened.

The enticing and high prices had misled people into far greater operations than the available cash justified. It was so easy, and cheap besides, to get credit. The bank discount was low. In 1844 it was $1\frac{3}{4}$ to $2\frac{3}{4}\%$, in 1845 until October it was less than 3%, then it rose for a little while to 5% (until February 1846), then it fell once more to $3\frac{1}{2}\%$ in December 1846. The bank had in its cellars a supply of gold of unusual dimensions. All inland quotations stood higher than ever before. Why should a man let this fine opportunity pass by? Why shouldn't he go in for all he was worth? Why not send to the foreign markets, that longed for English goods, all the commodities that could be manufactured? And why should not the manufacturer himself pocket the double gain arising from the sale of yarn and fabrics to the Far East, and from the sale, in England, of the back freight received in their stead?

Thus arose the system of mass consignments, by virtue of advances, to India and China, and this soon developed into a system of consignments purely for the sake of getting advances, as described more at length in the following notes. This had to lead inevitably to an overcrowding of the markets and to a crash.

This crash came as the aftermath of a crop failure in 1846. England, and still more, Ireland, required enormous imports of means of subsistence, particularly of corn and potatoes. But the countries that supplied these things could be paid only to a very small degree in products of English industry. They had to be paid in precious metals. This took at least nine millions of gold to foreign countries. Of this amount of gold fully seven and a half millions came out of the cash treasury of the Bank of England, whose freedom of action on the money market was seriously impaired thereby. The other banks, whose reserves are deposited with the Bank of England, which reserves are practically identical with those of the Bank of England, were thus compelled to cut down their own money accommodations. The rapidly and easily flowing stream of payments became clogged, first here and there, then universally. The banking discount, which had

still been 3 to 3½% in January of 1847, rose to 7% in April, when the first panic broke out. Then a temporary lull came in summer, lowering this discount to 6½ and 6 %. But when the new crop failed likewise, the panic broke out afresh and more violently. The official minimum discount of the Bank rose in October to 7%, in November to 10%, in other words, the overwhelming mass of checks could be discounted only at outrageous rates of interest, or not at all. The general stopping of payments brought about the bankruptcy of several of the first firms and of very many medium-sized and small firms. The Bank itself was in danger of ruin from the shrewd Bank Acts imposing the limitations of 1844. In this emergency the government yielded to the universal demand and suspended these Bank Acts on October 25, thereby taking off the absurd legal fetters thrown around the Bank. Now the Bank was enabled to throw its supply of bank notes into circulation without any interference. The credit of these bank notes being practically guaranteed by the credit of the nation, and thus unimpaired, the shortness of money was immediately relieved in the most effective manner. Of course, quite a number of hopelessly caught large and small firms failed nevertheless even then, but the climax of the crisis had passed, the banking discount fell once more to 5% in September, and in the course of 1848 that renewed business activity was resumed, which took the edge off the revolutionary movements on the continent in 1849, and which inaugurated in the fifties a formerly unknown industrial prosperity and ended — in the crash of 1857.— F. E.]

I. A document issued by the House of Lords in 1848 gives information concerning the depreciation of government papers and bonds during the crisis of 1847. According to it the depreciation of October 23, 1847, compared to the stand of values in February of the same year, amounted to 93,824,217 pounds sterling in English government bonds, 1,358,288 pounds sterling in dock and canal stock, and to 19,579,820 pounds sterling in railroad stocks, a total of 114,762,325 pounds sterling.

II. With reference to the swindle in East Indian business,

in which it was no longer a question of making drafts, because commodities had been bought, but rather of buying commodities in order to be able to make out discountable drafts which should be convertible into money, the "*Manchester Guardian*" of November 24, 1848, remarks that Mr. A in London instructs a Mr. B to buy from the manufacturer C in Manchester commodities for shipment to a Mr. D. in East India. B pays C in six-months-drafts to be made by C on B. B secures himself by six-months-drafts on A. As soon as the goods are shipped, and the bill of lading mailed, A makes out six-months-drafts on D. The buyer and shipper thus get possession of funds many months before the goods are actually paid for. And it was a common custom to renew the drafts when due under the pretense of allowing time for turn-over in such a protracted business. Unfortunately the losses in this business did not lead to its restriction, but to its extension. In proportion as the interested parties grew poor their need of making purchases increased, in order to find in new advances a compensation for capital lost in previous speculations. Purchases were then no longer regulated by supply and demand, but became the most important feature in the financial operations of a shaky firm. But this is only one side of the picture. What happened in the export of manufacturing goods here, occurred in the purchase and shipment of goods on the other side. Firms in India, which had credit enough to get their checks discounted, bought sugar, indigo, silk or cotton, not because the purchase prices as compared with the latest London quotations promised a profit, but because previous drafts on a London firm would soon be due and would have to be covered. What was simpler than to buy a cargo of sugar, to pay for it in ten-months-drafts on the London firm, and to send the bills of lading by overland mail to London? Less than two months later the bills of lading of these barely shipped goods, and thus the goods themselves, were pawned in Lombard Street, and the London house came into the possession of money eight months before the bills of exchange made out for these goods were due. And all this passed off smoothly, without interruption or difficulties, so long as the discounting firms found enough money to advance on bills of lading and dock warrants, and to discount the drafts of Indian firms on select firms of Mincing Lane to unlimited amounts.

[This fraudulent procedure remained in vogue so long as the goods from and to India had to sail around the Cape. But since they pass through the Suez Canal this method of creating fictitious capital has lost its foundation, thanks to steam navigation and the shortening of the trip. And when the telegraph reported the stand of the Indian market to the English and that of the English market to the Indian business man on the same day, this method was completely killed. F. E.]

III. The following is from the previously quoted report on Commercial Distress, 1847–48: In the last week of April, 1847, the Bank of England informed the Royal Bank of Liverpool, that it would henceforth reduce its discount business with the latter bank by one-half. This communication had a very disastrous effect, because the payments in Liverpool had lately been made far more in bills of exchange than in cash, and because the merchants, who ordinarily carried much cash money to the bank for the purpose of squaring their notes, had been able to bring only checks of late, which they had received themselves for their cotton and other products. This had assumed large proportions and caused the business difficulty. The endorsed checks, which the bank had to turn into cash for the merchants, had mostly been made out by outsiders, and had so far been balanced generally by the payments received for the products. The checks which the merchants now brought in place of the former cash were bills of exchange for different lengths of time and of different kinds, a considerable number being bank checks for three months from date, the majority being checks for cotton. These bills of exchange, when bank checks, had been endorsed by London bankers, the others were endorsed by merchants in Brasilian, American, Canadian, West Indian, etc., business. . . . The merchants did not draw on one another, but the customers in the home country, who had bought products in Liverpool, covered them by drafts on London banks, or drafts on other firms in London, or on drafts of some one else. The communication of the Bank of England caused a shortening of the running time of checks drawn against sales of foreign products, which used to run frequently longer than three months. (p. 26, 27.)

The period of prosperity in England, from 1844 to 1847 was, as described above, connected with the first great rail-

road swindle. The above-named report makes the following statements concerning the influence of this swindle on business in general: In April, 1847, nearly all commercial firms had begun to starve their business more or less, by investing a part of their commercial capital in railroads (p. 41.) — Loans were also made by private parties, bankers and insurance companies at a high rate of interest, for instance, at 8% (p. 66). These large advances of these business firms to railroads caused them to take up in their turn too much capital from banks on discount checks, by which to carry on their own business (p. 67.— (Question): Would you say that the payments on railroad stocks contributed much to the pressure which burdened the money market in April and October 1847? (Answer): I believe that they hardly contributed anything to the pressure in April. In my opinion they had rather strengthened than weakened the bankers going on into April, and perhaps even into the summer. For the actual employment of the money followed by no means as rapidly as the deposits: as a result most of the banks had a rather large amount of railroad stocks in their hands in the beginning of the year. [This is corroborated by numerous statements of bankers in C. D. 1848–57.] This gradually melted away in summer and was considerably smaller on December 31. One cause of the pressure in October was the gradual decrease of the railroad funds in the hands of bankers; between April 22, and December 31, the balances of railroads in our hands were reduced by one-third. This effect was produced by railroad deposits in all of Great Britain; they have gradually stripped the banks of deposits (p. 43, 44).— Samuel Gurney (Chief of the ill-famed firm of Overend Gurney & Co.) says likewise: In 1846 there was a much greater demand for capital for railways, but it did not raise the rate of interest. There was a condensation of small sums into larger masses, and these larger masses were consumed in our market; so that on the whole the effect was to throw more money on the money market of the city, not so much to take it out.

A. Hodgson, Director of the Liverpool Joint Stock Bank, shows to what extent bills of exchange may form a reserve for bankers: It was our custom to hold at least nine-tenths of all our deposits, and all money received from our customers, in our bill books in the shape of bills of exchange.

which fell due from day to day . . . so much so, that the amount of bills due daily during the time of the crisis almost equaled the amount of demands for payment made on us every day (p. 53).

Speculative Bills.— No. 5092. "By whom were the bills of exchange (against sold cotton) mainly endorsed?"— (R. Gardner, the cotton manufacturer mentioned several times in this work): "By produce jobbers: one trader buys cotton, transfers it to some jobber, draws checks on this jobber, and gets these bills discounted."— No. 5095. "And these bills of exchange go to the Liverpool banks and are discounted by them?"—"Yes, and also by others. . . . Had not this accommodation existed, which was mainly allowed by the Liverpool banks, cotton would have been, in my opinion, from 1½ d to 2 d per pound cheaper last year."— No. 600. "You said that an enormous number of bills of exchange was in circulation, drawn by speculators upon cotton jobbers in Liverpool; does the same apply to your advances on bills of exchange for other colonial produces than cotton?"— (A. Hodgson, banker in Liverpool): "It refers to all kinds of colonial products, but most particularly to cotton."— No. 601. "Do you, as a banker, try to keep away from bills of exchange of this sort?"—"Not at all: we regard them as legitimate bills when kept within moderate bounds. . . . This sort of bills is often prolongued."

Swindle in the East Indian and Chinese Market, 1847.— Charles Turner (Chief of one of the first East Indian firms in Liverpool): "We all know the occurrences, which have taken place in the matter of business to Mauritius and similar businesses. The jobbers were accustomed to make advances on goods, not only after their arrival, for the covering of the bills of exchange drawn for those goods, which is quite in order, and advances on bills of lading . . . they have also made advances on the produce before it had been shipped, and in some cases before it had been manufactured. For instance, I had, in one case in Calcutta, bought bills of exchange amounting to 6–7,000 pounds sterling; the proceeds of these goods went to Mauritius in order to assist in planting sugar there; the bills came to England, and more than half of them were protested; then, when the shipments of sugar finally arrived, by which these bills were to have been paid,

it was found that this sugar had already been pawned to third parties, before it had been shipped, or even before it had been boiled (p. 78). Now the goods for the East Indian market must be paid to the manufacturer in cash; but this does not mean much, for if the buyer has some credit in London, he draws on London and discounts the drafts in London, where the discount is now low; he pays the manufacturer with the money so obtained . . . it takes at least twelve months before a shipper of goods to India receives his return shipment . . . a man with ten or fifteen thousand pounds sterling going into Indian business would secure credit from some London house to a considerable amount; he would give to this house 1% and draw on it with the understanding, that the proceeds of the goods sent to India are to be sent to this London house; but the tacit understanding on both sides is that the London house shall not have to make any advances of cash; in other words, the drafts are prolongued until the return shipments arrive. The bills of exchange are discounted in Liverpool, Manchester, London, some of them are held by Scotch banks" (p. 79).— No. 730. "There is a firm, which recently failed in London; the examination of its books revealed the following condition of affairs: Here is one firm in Manchester, and another in Calcutta; they opened a credit with the London firm for 200,000 pounds sterling; that is, the business friends of this Manchester firm, who sent consignments of goods from Glasgow and Manchester to the firm in Calcutta, drew on the London house up to the sum of 200,000 pounds sterling; at the same time the understanding was, that the Calcutta firm would also draw on the London firm up to the sum of 200,000 pounds sterling; these bills of exchange were sold in Calcutta, other bills of exchange were bought with the proceeds, and these were sent to London in order to enable the firm there to pay the first drafts made by the Glasgow or Manchester firm. In this way this firm sent bills of exchange amounting to 600,000 pounds sterling into the world."— No. 971. "At present, when a firm in Calcutta buys a ship's cargo (for England) and pays for it with its own drafts on its London correspondent, and when the bills of lading are sent here, these bills of lading are used immediately for the purpose of securing advances in Lombard Street; hence they have eight months time in which

to make use of the money before their correspondents have to pay the drafts."—

IV. In the year 1848 a secret committee of the Upper House was in session on an investigation of the causes of the crisis of 1847. The testimony of the witnesses before this committee was not published, however, until 1857 (Minutes of Evidence, taken before the Secret Committee of the H. of L. appointed to inquire into the Causes of Distress, etc., 1857; quoted as C. D. 1848-57). Here Mr. Lister, the Director of the Union Bank of Liverpool, testified among other things to the following: 2444. "There was, in the spring of 1847, an unwarranted extension of credit . . . because business men transferred their capital from their business to railroads and nevertheless wanted to continue their business on the old scale. Every one thought probably at first that he could sell the railroad stocks at a profit and thus replace the money in the business. He found, perhaps, that this was impossible, and then secured credit in his business where he paid cash formerly. This gave rise to an extension of credit."

2506. "These bills of exchange, on which the banks that had accepted them incurred losses, were they bills mainly for corn or for cotton? . . . They were bills for products of all kinds, corn, cotton and sugar, and products of all sorts. There was at that time nothing, with the exception of oil, perhaps, that did not fall in price."— 2506. "A jobber, who accepts a bill of exchange, does not do so without being sufficiently secured, also against a fall in the price of the commodity which serves as a security."

2512. "Two kinds of bills of exchange are drawn for products. To the first kind belongs the original draft, which is made out on the other side on the importer. . . . The drafts which are made out in this way for products are frequently due before the goods arrive. For this reason the merchant who has not enough money when the products arrive, must pawn them to some broker until he can sell them. Then a draft of the other kind is immediately drawn on the broker by the Liverpool merchant, on the strength of these products . . . it then becomes the business of the banker to ascertain, whether he has those goods and to what extent he has made advances on them. He must convince himself,

that the broker has security, in order to make good eventual losses."

2516. "We receive also bills of exchange from foreign countries. . . . Some one buys on the other side a bill of exchange on England, and sends it to some firm in England; we cannot tell by looking at this bill, whether it has been drawn reasonably or unreasonably, whether it represents products or wind."

2533. "You said that foreign products of nearly all kinds are sold at a heavy loss. Do you believe, that this was due to unwarranted speculations in these products?"—"It arose from a very large import, while no adequate consumption existed to take care of it. From all indications the consumption fell off considerably."—2537. "In October . . . products were almost unsaleable."

How it is that a general scramble for safety is made at the critical stage of a crisis is explained in the same report by an expert of the first order, the worthy and crafty Quaker, Samuel Gurney of Overend Gurney & Co.: 1262. "When a panic reigns, a business man does not ask himself, how profitably he can invest his bank notes, or whether he will lose 1 or 2% in the sale of his treasury notes or 3% bonds. Once that he is under the suggestions of fright, he cares nothing about gain or loss; he gets himself into a safe place, the rest of the world may do what it pleases."

V. Concerning the mutual unmasking of two markets Mr. Alexander, a merchant in the East Indian trade, testifies before the Committee of the Lower House on the Bank Acts of 1857 (quoted as B. C. 1857): 4330. "At present, if I invest 6 shillings in Manchester, I get 5 shillings back in India; if I invest 6 shillings in India, I get 5 shillings back in London." In this way the Indian market is exposed by England, and the English by India. And this took place in the summer of 1857, barely ten years after the bitter experience of 1847!

CHAPTER XXVI.

ACCUMULATION OF MONEY-CAPITAL. ITS INFLUENCE ON THE RATE OF INTEREST.

"In England, a steady accumulation of additional wealth takes place, which has a tendency to assume ultimately the form of money. But next to the desire to acquire money, the most insistent desire is that of disposing of it by some kind of investment bringing interest or profit; for money as money does not bring wealth. Unless, therefore, a gradual and adequate extension of the field of investment takes place simultaneously with this steady accession of additional capital, we must be exposed to periodical accumulations of money seeking investment, which will be of greater or smaller importance according to circumstances. For a long series of years the national debt was the great means of absorbing the superfluous wealth of England. Since it reached its maximum in 1816 and no longer acts as an absorbent, every year a sum of at least 27 millions has been seeking other fields of investment. Moreover, various return payments of capital were made. . . . Enterprises which require a large capital for their execution and make an opening from time to time for the excess of unemployed capital . . . are absolutely necessary, at least in our country, in order to take care of the periodical accumulations of the superfluous wealth of society, which cannot find room in the ordinary fields of investment." *(The Currency Question Reviewed,* London, 1845, p. 32.) Of the year 1845 the same work says: "Within a very short period the prices have leaped upward from the lowest point of depression. . . . The 3% national debt stands almost at par. . . . The gold in the vaults of the Bank of England exceeds all former amounts stored away there. Stocks of all kinds are quoted at prices,

which are unheard of in almost every case, and the rate of interest has fallen so much, that it is nearly nominal. . . . All these are proofs that another heavy accumulation of unemployed wealth exists in England, that another period of speculative overheating is imminent." (*Ibidem,* p 35.)

"Although the import of gold is not a reliable indication of profit in foreign commerce, nevertheless a part of this import of gold, in the absence of any other explanation, represents on its face such a profit." (J. G. Hubbard, *The Currency and the Country,* London, 1843, p. 41.) Take it that in a period of good steady business, profitable prices, and well supplied circulation of money, a crop failure gives rise to an export of 5 millions of gold and to an import of corn to the same amount. The circulation" (meaning, as we shall see immediately, the unemployed money-capital, not the medium of circulation. F. E.) "is reduced by the same amount. The private individuals may still possess means of circulation to the same amount, but the deposits of the merchants in the banks, the outstanding balances of the banks with their money brokers, and the reserves in their treasuries will all be reduced, and the immediate result of this reduction to the amount of the unemployed capital will be a rise in the rate of interest, say from 4% to 5%. Since business is sound, confidence is not shaken, but credit will be valued more highly." (*Ibidem,* p. 42.) "If the prices of commodities fall universally, the superfluous money flows back to the banks in the form of increased deposits, the plethora of unemployed capital reduces the rate of interest to a minimum, and this condition of affairs lasts until either higher prices or a brisker business call the slumbering money into service, or until it has been absorbed by investment in foreign securities or foreign commodities." (P. 68.)

The following extracts are once more taken from the parliamentarian report on Commercial Distress, 1847–57.— In consequence of the crop failure and famine of 1846–47 a heavy import of means of subsistence was necessary. "Hence a great excess of imports over exports. . . . Hence a considerable drain of money from banks, and an increased

demand upon the discount brokers from people who had bills of exchange to discount; the brokers began to inspect the bills of exchange more closely. The accommodation hitherto granted was seriously restricted, and weak houses failed. Those who relied wholly upon credit went to the wall. This increased the already marked unrest; bankers and others found, that they could not be as certain as formerly of transforming their bills of exchange and other securities into bank notes, in order to fulfill their obligations; they restricted the accommodation still more and frequently refused it altogether; they locked their bank notes up in many instances, in order to meet their own future obligations; they preferred not to let go of them at all. The unrest and confusion increased daily, and without the letter of Lord John Russel the general bankruptcy was imminent." (P. 74–75.) The letter of Russel suspended the Bank Acts.— The previously mentioned Charles Turner testifies: "Some firms had large means, but they were not available. Their entire capital was tied up in real estate in Mauritius, or in indigo or sugar factories. Once that they had contracted obligations for 5 or 600,000 pounds sterling, they had no means free for the payment of bills of exchange, and finally it was seen, that they could pay their bills of exchange only by means of credit, and so far as that went." (P. 81.) — The aforesaid S. Gurney said: "At present (1848) there prevails a contraction of business and a great plethora of money.— No. 1763. I do not believe that it was a lack of capital, which drove the rate of interest so high; it was the alarm, the difficulty of obtaining bank notes."

In 1847 England paid at least nine million pounds sterling in gold to foreign countries for imported means of subsistence. Of this amount seven and a half millions came from the bank of England and one and a half million from other sources. (P. 245.) — Morris, the Governor of the Bank of England: "On October 23, 1847, the public funds and the canal and railroad stocks were already depreciated by 114,752,225 million pounds sterling." (P. 312.) The same Morris, when questioned by Lord G. Bentinck: "Is it not known to you that all capital invested in papers and products of all

kinds was depreciated in the same way, that raw materials, cotton, silk, wool were sent to the continent at the same cut prices, and that sugar, coffee and tea were auctioned off in forced sales?" — "It was inevitable that the nation should make considerable sacrifices, in order to counteract the drain of gold caused by the enormous imports of means of subsistence." — "Don't you believe that it would have been better to touch the eight million pounds sterling stored in the vaults of the bank, instead of trying to recover the gold with such sacrifices?"—"I do not believe that."—Now to the commentaries on this heroism. Disraeli questions Mr. W. Cotton, the Director and former Governor of the Bank of England. "What was the dividend received by the stockholders of the bank in 1844?"—"It was 7% for that year."—"And the dividend for 1847?"—"Nine per cent."—"Does the bank pay the income tax for its stockholders in the current year?"—"Yes, Sir."—"Did it do so in 1844?"—"No, Sir." [84]—"Then this Bank Act (of 1844) worked very much to the advantage of the stockholders. . . . The result is, then, that since the introduction of the new Act the dividend of the stockholders has risen from 7% to 9%, and that the income tax is now also paid by the bank, while formerly it had to be paid by the stockholders?"—"That is quite right." — (No. 4356–4361.)

Concerning the formation of hoards in banks during the crisis of 1847, Mr. Pease, a provincial banker, has the following to say: 4605. "As the bank was compelled to raise its rate of interest more and more, the apprehension grew universally; the rural banks increased the quantities of money in their possession and likewise the amounts of their notes; and many of us, who would ordinarily carry only a few hundred pounds in gold or bank notes, stored up at once thousands in cash boxes and desks, since there was great uncertainty concerning the discount and the possibility of circulat-

[84] In other words, formerly the dividend was first determined and then the income tax deducted on payment of the dividend to the individual stockholder; but after 1844 the income tax was first paid out of the total profit of the bank, and then the dividend paid "free of income tax." The same nominal percentages are therefore higher in the latter case by the amount of the tax.— F. E.

ing bills of exchange on the market; and consequently a universal accumulation of hoards ensued."— A member of the Committee remarks: 4691. "Accordingly, whatever may have been the cause during the last 12 years, the result was certainly more in favor of the Jew and the money broker than in favor of the productive class in general."

To what extent a money broker exploits times of crisis, is revealed by Tooke: "In the metal ware business of Warwickshire and Stafford-shire very many orders were rejected in 1847, because the rate of interest, which the manufacturer had to pay for discounting his bills of exchange, would have more than swallowed his entire profit." (No. 5451.)

Let us now take another report of Parliament, the Report of the Select Committee on Bank Acts, communicated from the Commons to the Lords, 1857 (quoted further along as B. C. 1857). In it Mr. Norman, Director of the Bank of England and a leading light among the champions of the Currency Principle, is questioned as follows:

3635. "You said you were of the opinion, that the rate of interest depends, not on the mass of bank notes, but on the demand and supply of capital. Would you state, what you comprise under the head of capital, outside of bank notes and hard cash?"—"I believe the general definition of capital is: Commodities or services used in production.— 3636. "Do you include all commodities in the term capital, when you speak of the rate of interest?"—"All commodities used in production." — 3637. "You include all that in the term capital, when you speak of the rate of interest?"—"Yes, Sir. Let us assume that a cotton manufacturer needs cotton for his factory, then he will probably secure it by obtaining an advance from his banker, and with the money so obtained he will go to Liverpool and buy. What he really needs is cotton; he does not need the bank notes or the money except as means of getting the cotton. Or he may need the means to pay his laborers: then he again borrows notes and pays the wages of his laborers with them: and the laborers on their part need food and shelter, and the money is a means of paying for them."— 3638. "But interest is paid for this

money?"—"Yes, Sir, in the first instance; but take another case. Take it that he buys the cotton on credit, without getting any advance from the bank: then the difference between the price for cash payment and the price on credit at the time when payment is due is the measure of the interest. There would be interest even if no money existed."

This self-complacent rubbish is quite worthy of this pillar of the Currency Principle. First the brilliant discovery, that bank notes or gold are means of buying something, and that they are not borrowed for their own sake. And this is supposed to explain, that the rate of interest is regulated, by what? By the demand and supply of commodities, that were so far known to regulate only the market prices of commodities. But very different rates of interest are compatible with the same market prices of commodities.— But now take another look at this slyness. He hears the correct remark: "But interest is paid for this money?" and this, of course, implies the question: "What has the interest, which the banker receives, who does not deal in commodities at all, to do with these commodities? And do not manufacturers receive money at the same rate of interest, although they invest it in widely different markets, that is, in markets, in which widely different conditions of demand and supply prevail, so far as the commodities used in production are concerned?" And all that this solemn genius has to say in reply to these questions, is that the manufacturer, who buys cotton on credit, pays interest, the measure of which is "The difference between the price for cash payment and the price on credit at the time when payment is due." Vice versa. The prevailing rate of interest, whose regulation the genius Norman is asked to explain, is the measure of the difference between the cash price and the credit price to the time of due payment. First the cotton is to be sold to its cash price, and this is determined by the market price, which is itself regulated by the condition of supply and demand. Say that the price is 1,000 pounds sterling. This concludes the transaction between the manufacturer and the cotton broker, so far as buying and selling is concerned. Now a second transac-

tion is added. This takes place between the lender and the borrower. The value of 1,000 pounds sterling is advanced to the manufacturer in the shape of cotton, and he has to repay it in money, say, in three months. And the interest for 1,000 pounds sterling, determined by the market rate of interest, forms the addition over and above the cash price. The price of cotton is determined by supply and demand. But the price of the advance of the value of cotton, of 1,000 pounds sterling for three months, is determined by the rate of interest. And this fact, that the cotton itself is thus transformed into money-capital, proves to Mr. Norman that interest would exist, even if no money existed. If there were no money at all, there would certainly be no general rate of interest.

There is, in the first place, the vulgar conception of capital as "commodities used in production." So far as these commodities serve as capital, their value as *capital* compared to their value as *commodities* is expressed in the profit, which is made out of their productive or mercantile employment. And the rate of profit has under all circumstances something to do with the market price of the bought commodities and their supply and demand, although it is determined besides by circumstances of quite a different kind. And there is no doubt that the rate of interest is generally limited by the rate of profit. But Mr. Norman is precisely asked to tell us how this limit is determined. It is determined by the supply and demand of *money-capital as distinguished from the other forms of capital.* Now one might ask furthermore: How are the demand and supply of money-capital determined? It is doubtless true, that a tacit connection exists between the supply of commodity-capital and the supply of money-capital, and also that the demand of the industrial capitalist for money-capital is determined by the actual conditions of real production. Instead of giving us information on this point, Norman offers us the sage opinion, that the demand for money-capital is not identical with the demand for money as such, and this wisdom is advanced for no other reason than that behind him. Above Overstone and other Currency proph-

ets always stands the bad conscience, which makes them aware that they are trying to make capital of the mere medium of circulation by the artificial method of legislative intereference and to raise the rate of interest.

Now to Lord Overstone, alias Samuel Jones Loyd, who is asked to explain, why he takes 10% for his "money," because the "capital" in the country is so scarce.

3653. "The fluctuations in the rate of interest arise from one of two causes: From a change in the value of capital" [excellent! Value of capital, generally speaking, signifies precisely the rate of interest! A change in the rate of interest is thus made to arise from a change in the rate of interest. The phrase 'value of capital' never signifies anything else theoretically, as we have shown in another place. Or, if Lord Overstone means the rate of profit by the phrase 'value of capital,' then this deep thinker comes back to the position that the rate of interest is regulated by the rate of profit!] "or from a change in the sum of money available in the country. All great fluctuations of the rate of interest, great either in duration or in the extent of the fluctuations, may be clearly traced to changes in the value of capital. There can be no more striking illustration of this fact than the rise of the rate of interest in 1847 and again in the two last years (1855–56); the lesser fluctuations of the rate of interest, which arise from a change in the quantity of the available money, are small in duration and extension. They are frequent, and the more frequent they are, the more effectively they accomplish their purpose." This purpose is no other than that of making bankers like Overstone rich. Friend Samuel Gurney expresses himself very naively on this point before the Committee of Lords, C. D. 1848. "Are you of the opinion, that the great fluctuations of the rate of interest, which took place last year, were advantageous to the bankers and money brokers, or not?" — "I believe they were advantageous to the money brokers. All fluctuations of business are advantageous to the knowing men." — 1325. "Should not the banker ultimately lose through the high rate of interest owing to the pauperisation of his best customers?" — "No,

Sir, I do not think that this result prevails to any appreciable degree." — There you can see what talk will do.

We shall recur to the question of the influence of the quantity of available money on the rate of interest later on. But we must note right here that Overstone once again takes one thing for another in this case. The demand for money-capital in 1847 (there was no worry on account of scarcity of money, or the "quantity of available money," as he called it, before October) increased for various reasons, such as the dearness of corn, rising cotton prices, unsaleable sugars through overproduction, railroad speculation and slumps, overcrowding of foreign markets with cotton goods, the above described forced export to and import from India for the purpose of mere swindling with bills of exchange. All these things, the overproduction in industries as well as the underproduction in agriculture, in other words, widely different causes, led to an increased demand for money-capital in the shape of credit and money. The increased demand for money-capital had its causes in the course of the productive process itself. But whatever may have been the causes, it was the demand for *money*-capital which brought about the rise in the rate of interest, in the value of money-capital. If Overstone means to say that the value of money-capital rose because it rose, he is simply repeating himself. But if he means by "value of capital" a rise in the rate of profit which caused a rise in the rate of interest, we shall see immediately that this was not the case here. The demand for money-capital, and consequently the "value of capital," may rise even though the profit may decrease; as soon as the relative supply of money-capital decreases, its "value" increases. Overstone wants to establish the fact that the crisis of 1847, and the high rate of interest going with it, had nothing to do with the "quantity of available money," that is, with the regulations of the Bank Acts of 1844 which he had inspired; but as a matter of fact this crisis had something to do with these things, so far as the fear of exhausting the bank reserve — a creation of Overstone — added a money panic to the crisis of 1847–48. But this is not the main point here. There was a dearth

of money-capital, caused by the excessive volume of operations compared to the available means and brought to an eruption by disturbances in the process of production due to a crop failure, overcapitalisation of railroads, over-production, particularly of cotton goods, swindling practices in the Indian and Chinese business, speculation, superfluous imports of sugar, etc. What the people, who had bought corn at 120 shillings per quarter, lacked when it fell to 60 shillings, were the 60 shillings which they had paid too much and the corresponding credit for that amount in the Lombard advance on corn. It was by no means the lack of bank notes that prevented them from transforming their corn into money at its old price of 120 shillings. The same things applied to those who had bought sugar to such an excess that it became almost unsaleable. It applies likewise to the gentlemen who had tied up their floating capital in railroads and relied on credit to make up for it in their "legitimate" business. To Overstone all this is expressed in "a moral sense of the enhanced value of his money." But this enhanced value of money-capital had its direct counterpart on the other side in the shape of the depreciated money-value of the real capital (commodity-capital and productive capital). The value of capital in one form rose, because the value of capital in the other forms fell. Overstone, however, seeks to identify these two kinds of value of different sorts of capital in one sole value of capital in general, and he does it by opposing both of them to a scarcity of the medium of circulation, of available money. But the same amount of money-capital may be loaned with very different quantities of medium of circulation.

Take, for instance, his example of the year 1847. The official bank rate of interest stood at 3 to 3½% in January; 4 to 4½% in February. In March it was generally 4%. April (panic) 4 to 7½%. May 5 to 5½%. June on the whole 5%. July 5%. August 5 to 5½%. September 5% with trifling variations of 5¼, 5½, 6%. October 5, 5½, 7%. November 7 to 10%. December 7 to 5%.— In this case the interest rose, because the profits decreased and the money-values of commodities fell enormously. If

Overstone says here that the rate of interest rose in 1847, because the value of capital rose, he cannot mean anything else by "value of capital" but the value of money-capital, and this is precisely the rate of interest and nothing else. But later the cloven hoof appears and the value of capital is identified with the rate of profit.

As for the high rate of interest in 1856, Overstone was indeed ignorant of the fact that this was partially a symptom of the supremacy of credit jobbers, who paid interest, not from their profit, but with the capital of others; he maintained even a few months before the crisis of 1857 that "business is quite sound."

He testifies furthermore: 3722. "The conception that the business profit is destroyed by raising the rate of interest is highly erroneous. In the first place, a rise in the rate of interest is rarely of long duration; in the second place, if it is of long duration and considerable, it is in the nature of things a rise in the value of capital, and why does the value of capital rise? Because the rate of profit has risen."— Here, then, we learn at last, what the meaning of "value of capital" is. We remark, by the way, that the rate of profit may hold itself at a high level for a long time, and yet the industrial capitalist's profit may fall and the rate of interest rise to a point where it swallows the greater portion of the profit.

3724. "The raise of the rate of interest was a result of the enormous expansion of business in our country, and of the great rise in the rate of profit; and if complaint is made, that the raised rate of interest destroys these two things, which were its own cause, it is a logical absurdity, which one does not know how to characterise."— This is just as logical as though he had said: The increased rate of profit was the result of the raise of prices by speculation, and if complaint is made, that the raise of prices destroys its own cause, namely speculation, it is a logical absurdity, etc. That anything can ultimately destroy its own cause, is a logical absurdity only for the usurer, who is in love with the high rate of interest. The greatness of the Romans was the cause of their conquests,

and their conquests destroyed their greatness. Wealth is the cause of luxury, and luxury has a destructive influence upon wealth. The wiseacre! The idiocy of the present bourgeois world cannot be characterised more markedly than by the respect, which the "logic" of the millionaire, of this dunghill aristocrat, commanded in all England. By the way, even if high profits and an expansion of business may be the cause of a high rate of interest, a high rate of interest is for that reason by no means a cause of high profit. The question is precisely, whether such a high rate of interest (as was seen actually during the crisis) did not continue, or even reach its climax, after the high rate of profit had long gone the way of the flesh.

3718. "As for a great increase of the rate of discount, it is a circumstance, which arises entirely from the increased value of capital, and the cause of this increased value of capital, I believe, may be discovered by every one with perfect clearness. I have already mentioned the fact, that during the 13 years, which this Bank Act was in force, the commerce of England grew from 45 to 120 million pounds. Consider all the events implied by this brief statement in figures, consider the enormous demand for capital, which such a gigantic increase of commerce carries with it, and consider at the same time, the natural source of this great demand, namely the annual savings of the country, have been consumed during the last three or four years by unprofitable expenditures for purposes of war. I confess, I am surprised, that the rate of interest is not much higher; or in other words, I am surprised, that the shortage of capital in consequence of these gigantic operations is not much more stringent, than you have found it to be."

What a wonderful mixture of words on the part of our logician of usury! Here he is again with his increased value of capital! He seems to imagine, that on one side this enormous expansion of the process of reproduction took place, an accumulation of real capital, and that on the other side a "capital" existed, for which an "enormous demand" arose, in order to accomplish this gigantic increase of commerce!

Was not this enormous increase of production itself this increase of capital, and if it created a demand, did it not also create the supply, including an increased supply of money-capital? If the rate of interest rose so high, it did so merely because the demand for money-capital increased still more rapidly than its supply, which means, in other words, that the expansion of industrial production carried with it a greater volume of its transactions on a credit basis. That is to say, the actual industrial expansion caused an increased demand for "accommodation," and this last demand is evidently what our banker means by the "enormous demand for capital." It was surely not the expansion of this mere *demand* for capital, which raised the export business from 45 to 120 million pounds sterling. And again, what does Overstone mean when he says, that the annual savings of the country swallowed by the Crimean War form the natural source of the supply for this great demand? In the first place, how did England get its accumulations from 1792 to 1815, which was a far greater war than the little Crimean War? In the second place, if the natural source dries up, from what source did capital flow then? It is well known that England did not ask for any loans from foreign countries. But if there is an artificial source aside from the natural one, it would be a very peculiar method for a nation to utilise the natural source in war and the artificial one in business. But if only the old money-capital was available, could it double its effectiveness through a high rate of interest? Mr. Overstone thinks evidently that the annual savings of the country (which were supposed to have been consumed in this case) are converted only into money-capital. But if no real accumulation, that is, no real expansion of production and augmentation of the means of production, took place, what good would the accumulation of debtor's claims in money on this production do?

The increase in the "value of capital," which follows from a high rate of profit, is mistaken by Overstone for an increase, which follows from a greater demand for money-capital. This demand may increase for reasons, which are quite independent of the rate of profit. He quotes himself some exam-

ples, which show that it rose in 1847 as a result of the depreciation of real capital. He means by the value of capital now real capital now money-capital, just as it may suit his purpose.

The dishonesty of our banking lord, and his narrow minded banker's point of view, which he aggravates by posing as a schoolmaster, are further revealed by the following: 3728. "You said, that in your opinion the rate of discount is of no particular significance for the merchant; will you kindly state what you regard as an ordinary rate of profit?"—Mr. Overstone declares that it is "impossible" to answer this question.—3729. "Suppose the average rate of profit to be from 7 to 10%; in that case, a change in the rate of discount from 2% to 7 or 8% must appreciably affect the rate of profit, must it not?" [This question confounds the rate of industrial profit with the average rate of profit and overlooks the fact, that this last rate of profit is the common source of interest and industrial profit. The rate of interest may leave the average rate of profit untouched, but not the industrial profit.] Overstone replied: "In the first place, business men will not pay a rate of discount, which takes away most of their profits beforehand; they will rather close up their business." [Yes, if they can do so without ruining themselves. So long as their profit is large, they pay the discount, because they are willing, and when profit is low, they pay the discount because they must.] "What does discount mean? Why does a man discount a bill of exchange? . . . Because he desires to obtain a larger capital." [Hold on! Because he desires to anticipate the return of his tied-up capital in the form of money and to avoid the stopping of business; because he must meet due payments. He demands additional capital only when business is good, or when he speculates on another man's capital, though business may be bad. The discount is by no means a mere device to expand business.] "And why does he wish to obtain command of a greater capital? Because he wants to invest this capital; and why does he want to invest this capital?

Because it is profitable; but it would not be profitable for him, if the discount were to swallow his profit."

This self-complacent logician assumes that bills of exchange are discounted only for the purpose of expanding business, and that business is expanded, because it is profitable. The first assumption is wrong. The ordinary business man discounts, in order to anticipate the money-form of his capital and thereby to keep his process of reproduction in flow; not in order to expand his business or secure additional capital, but in order to balance the credit which he gives by the credit which he takes. And if he wants to expand his business on credit, the discounting of bills will do him little good, because it is merely the transformation of capital, which he has already in his hands, from one form into another; he will rather take up a direct loan for a long time. Only the credit swindler will get his fraudulent bills of exchange discounted for the purpose of expanding his business, in order to cover one rotten business by another; not for the purpose of making profits, but of getting possession of the capital of another man.

After Mr. Overstone has thus identified discount with the borrowing of additional capital [instead of identifying it with the transformation of bills of exchange representing capital into money], he beats at once a retreat, when the thumbscrews are applied to him.— 3730. "Must not merchants, once that they are engaged in business, continue their operations for a certain period of time in spite of a temporary increase in the rate of interest?"— Overstone: "There is no doubt, that in any single transaction, if a man can get hold of capital at a low rate of interest instead of a high rate of interest, taking the matter from this narrow point of view, that it is pleasant for him."— But it is a very wide point of view, which enables Mr. Overstone now to understand by "capital" all of a sudden only his banker's capital, and to assume that the man, who discounts a bill of exchange with him, is a man without capital, just because his capital exists in the form of commodities, or because the money-form of his capital is a bill of exchange, which Mr. Overstone converts into another money-form.

3732. "With reference to the Bank Act of 1844, can you state what was the approximate relation of the rate of interest to the gold reserve of the bank; is it true, that, if the gold in the bank amounted to 9 or 10 millions, the rate of interest was 6 or 7%, and when it amounted to 16 millions, the rate of interest was about 3 or 4%?" [The cross-examiner wants to compel him to explain the rate of interest, so far as it is influenced by the amount of gold in the bank, by the rate of interest, so far as it is influenced by the value of capital.] — "I do not say, that this is the case . . . but if it is, then we should in my opinion resort to still more stringent measures than those of 1844; for if it should be true, that the greater the quantity of gold the lower the rate of interest, then we should go to work, according to this view of the matter, and increase the gold reserve to an unlimited amount, and then we should reduce the rate of interest to zero."— The cross-examiner Cayley, unmoved by this poor joke, continues: 3733. "If this were so, assuming that 5 millions in gold were returned to the bank, then in the course of the next six months the gold reserve would amount to 16 millions, and assuming that the rate of interest should fall thus to 3 or 4%, how could one maintain, that the fall in the rate of profit was due to a great slump in business?"—"I said the recent great increase in the rate of interest, not the fall in the rate of interest, is intimately connected with the great expansion of business."— But what Cayley says is this: If a rise of the rate of interest together with a contraction of the gold reserve, is an indication of an expansion of business, then a fall of the rate of interest together with an expansion of the gold reserve, must be an indication of a contraction of business. Overstone has no answer to this. — 3736. Question: "I note that Your Lordship said that money is an instrument for securing capital." [This is precisely a mistake, this conception of money as an instrument: it is a *form* of capital.] "During a decrease of the gold reserve (of the Bank of England) does not the difficulty consist rather in the fact that capitalists cannot get any money?"— Overstone: "No, it is not the capitalists, it is the non-capitalists, who

seek to obtain money, in order to carry on the business of people, who are not capitalists."— Here he declares point blank, that manufacturers and merchants are not capitalists, and that the capital of the capitalist is only money-capital.— 3737. "Are the people who draw bills of exchange no capitalists?"—"The people who draw bills of exchange are probable capitalists and probably not."— Here he is stuck.

He is then asked, whether the bills of exchange of merchants do not represent the commodities, which they have sold or shipped. He denies, that these bills represent the value of the commodities just exactly as a bank note represents gold. (3740 and 41.) This is a little insolent.

3742. "Is not the purpose of the merchant that of obtaining money?"—"No; to obtain money is not the purpose of drawing a bill of exchange; to obtain money is the purpose of discounting the bill." — The drawing of bills of exchange is a conversion of commodities into a form of credit-money, just as the discounting of bills of exchange is the conversion of credit-money into other money, namely bank notes. At any rate Mr. Overstone admits here, that the purpose of discounting is to obtain money. A while ago he said that discounting was a means, not of transforming capital from one form into another, but of obtaining additional capital.

3742. "What is the great desire of the business world under the pressure of a panic, such as occurred according to your testimony in 1825, 1837 and 1839; do they want to secure possession of capital or of legal tender money?"—"They want to obtain command of capital, in order to continue their business."— Their purpose is to obtain means of payment for due bills of exchange on themselves, on account of the prevailing lack of credit, so that they may not have to get rid of their commodities below price. If they have no capital at all themselves, then they receive with the means of payment at the same time capital, because they receive value without giving an equivalent. The desire to obtain money as such consists always in the wish to transform value from the form of commodities or creditor's claims into money. Hence also, aside from crisis, the great difference between the borrowing

of capital and discount, the last being a mere transformation of money claims from one shape into another, or into real money.

[I take the liberty, in my capacity of editor, to interpolate a few remarks here.]

With Norman as well as Loyd-Overstone the banker always figures as a man, who advances "capital" to others, and his customers appear as people, who demand "capital" from him. Thus Overstone says, that people have bills of exchange discounted through him, "because they wish to obtain capital" [3729], and that it is pleasant for such people to "obtain command of capital" at a "low rate of interest" [3730]. "Money is an instrument for obtaining capital" [3736], and during a panic the great desire of the business world is to "obtain command of capital" [3743]. All the confusion of Loyd and Overstone notwithstanding they reveal at least the fact that they call the thing, which the banker gives to his customer, capital, and that this is a thing formerly not in the possession of the customer, but advanced to him in addition to the one already in his hands.

The banker has become so well accustomed to figure as the distributor [through loans] of the social capital available in the form of money, that he considers every function, by which he hands out money, as loaning. All the money which he pays out appears to him as a loan. If the money is directly loaned, it is literally true. If it is invested in the discounting of bills, then it is in fact advanced by himself until the bill becomes due. In this way the conception grows upon him that he cannot make any payments without loaning money to somebody. And these are loans, not merely in the sense that every investment of money, which has for its object the taking of interest or profit, is economically considered an advance of money, which the owner of money in his capacity as a private individual makes to himself in his capacity as an *entrepreneur*. They are loans in the definite sense that the banker loans to his customer a sum of money, which constitutes an addition to the capital already held by him.

It is this conception, which, transferred from the banker's

office to political economy, has created the confusing controversy, whether the thing, which the banker loans to his customer in the shape of cash money, is capital or mere money, medium of circulation or currency. In order to decide this fundamentally simple controversy, we must place ourselves in the position of a customer of a bank. It depends what this customer wants and receives.

If the bank allows to its customer a loan on his own private credit, without any security on his part, then the matter is clear. He certainly receives in that case an advance of a definite amount in addition to the capital so far invested by him. He receives this advance in the form of money; it is not merely money, but money-capital.

If on the other hand, he receives an advance on depositing securities, etc., then this is money paid to him on condition that he pay it back, but it is not capital. For the securities also represent capital, and at that of a larger amount than the money advance upon them. The receipient of the advance receives less capital-value than he deposits as a security; hence the advance is not additional capital for him. He does not agree to this transaction, because he needs capital — for he has this in his securities — but because he needs money. Therefore we have in this case an advance of money, not of capital.

If the loan is granted by discounting bills, then even the *form* of an advance disappears. The transaction is then purely one of buying and selling. The bill passes by endorsement into the possession of the bank, while the money passes into the possession of the customer. There is no question of any return payment on either side. If a customer buys with a bill of exchange or some similar instrument of credit cash money, it is no more an advance than it is if he buys cash money with other commodities, such as cotton, iron, corn. Still less can this be called an advance of capital. Every purchase and sale between merchant and merchant transfers capital. But an advance of capital takes place only then, when a bill is a fraudulent one, which does not represent any commodities at all, and no banker will take such a bill, if he

is aware of its nature. In the regular discounting business the customer of the bank does not, therefore, receive any advance, either of capital or of money, but he receives money for sold commodities.

The cases, in which the customer demands capital from a bank and receives it are thus very plainly distinguished from those, in which he merely receives an advance of money or buys it from the bank. And since particularly Mr. Loyd-Overstone very rarely advanced any funds without collateral [he was the banker of my firm in Manchester] it is very evident that his beautiful descriptions of the great quantities of capital loaned by the generous bankers to the manufacturers in need of capital are gross inventions.

In chapter XXXII Marx says practically the same thing: "The demand for means of payment is a mere demand for *convertibility into money*, so far as merchants and producers have good securities to offer; it is a demand for *money-capital* whenever there is no collateral, so that an advance of means of payment gives to them not only the *form of money*, but also the equivalent, whatever be its form, with which to make payment."—And again in chapter XXXIII: "Under a developed system of credit, when the money is concentrated in the hands of the bankers, it is they, at least nominally, who make advances of money. This advance does not refer to the money already in circulation. It is an advance made to circulation, not an advance of capital circulated by it."—Likewise Mr. Chapman, who ought to know, corroborates this conception of the discounting business: B. C. 1857: "The banker has the bill, the banker has *bought the bill.*", Evid. Question 5139.

We shall return to this subject in chapter XXVIII. — F. E.] 3744. "Will you kindly describe, what you really mean by the term capital?"—Overstone: "Capital consists of various commodities, by means of which trade is carried on; there is a fixed capital and there is a circulating capital. Your ships, your docks, your wharves are fixed capital, your means of subsistence, your clothes, etc. are circulating capital."

3745. "Has the drain of gold to foreign countries injurious consequences for England?" — "Not so long as one combines this term with a rational meaning." [Then follows the old Ricardian theory of money] . . . "in the natural condition of things the money of the world distributes itself among the various countries of the world in certain proportons; these proportions are such, that with such a distribution [of money] the commerce between any one country on one side and all other countries on the other side is one of mere exchanges; but there are disturbing influences, which affect this distribution from time to time, and when these influences arise, a portion of the money of a given country flows off to other countries." 3746. "You are now using the term 'money'. If I understood you correctly on former occasions, you called this a loss of capital."— "What was it that I called a loss of capital?"— 3747. "The export of gold."— "No, I did not say that. If you treat gold as capital, then it is doubtless a loss of capital; it is a giving away of a certain portion of precious metal, of which the world money consists." — 3748. "Did you not say before that a change in the rate of discount is a mere indication of a change in the value of capital?" — "Yes." — 3749. "And that the rate of discount in general changes with the gold reserve in the Bank of England?" — "Yes, but I have already stated that the fluctuations of the rate of interest, which arise from a change in the quantity of money" [so this is what he calls the quantity of gold actually existing] "are very significant. . . ."

3750. "Then do you mean to say that a decrease of capital has taken place, when a longer, but still temporary, raise of the discount above the ordinary quotation has taken place?"— "A decrease in a certain sense of the word. The relation between capital and the demand for it has changed; but it may be only through an increased demand, not through a decrease in the quantity of capital." —

[But capital was for him precisely money or gold, and a little before that he had explained the rise of the rate of

interest by a rise of the rate of profit, which was due to an expansion, not to a contraction of business or capital.]

3751. "What kind of capital is it that you have particularly in mind here?" — "That depends entirely on what sort of a capital that every one needs. It is the capital which a nation has at its disposal in order to carry on its business, and if this business is doubled, a great increase must occur in the demand for that capital with which it is to be carried on." [This shrewd banker doubles first the business and then the demand for capital with which it is to be doubled. He never sees anything else but his customer, who asks Mr. Loyd for more capital by which to double the volume of his business.] — "Capital is like any other commodity;" [but according to Mr. Lloyd capital is nothing else but the totality of commodities] "it changes its price" [that is, the commodities change their price twice, one as commodities and the second time as capital] "according to supply and demand."

3752. "The fluctuations in the rate of discount are in a general way connected with the fluctuations of the gold reserve in the vaults of the bank. Is this the capital to which you refer?" — "No." — 3753. "Can you give an example, showing when a great supply of capital was accumulated in the Bank of England and at the same time the rate of discount stood high?" — "In the Bank of England it is not capital that is accumulated, but money." — 3754. "You testified that the rate of interest depends on the quantity of capital; will you kindly state, what kind of capital you mean, and whether you can quote an example, where a great supply of gold was held in the bank and at the same time the rate of interest was high?" — "It is very probable" [aha!] "that the accumulation of gold in a bank may coincide with a low rate of interest, because a period of low demand for capital" [namely money-capital; the time to which reference is made here, 1844 and 1845, was a period of prosperity] "is a period, in which naturally the means or instrument, by which capital is commanded, can accumulate." — 3755. "You think, then, that no connection exists between the rate

of discount and the quantity of gold in the bank vaults?" — "A connection may exist, but it is not a connection on principle;" [but his Bank Act of 1844 made it precisely a principle of the Bank of England to regulate the rate of interest by the quantity of gold in its possession] "there may be a coincidence of time." — 3758. "Do you intend to say that the difficulty of the merchants in this country, during times of scarcity of money due to a high rate of interest consists of obtaining capital, and not in obtaining money?" — "You are throwing together two things, which I do not bring together in this form; the difficulty consists in getting capital, and it also consists in getting money. . . . The difficulty of obtaining money, and the difficulty of obtaining capital, is the same difficulty considered at two different stages of its development." — Here the fish is caught once more. The first difficulty is to discount a bill of exchange, or to obtain a loan on security of commodities. It is the difficulty of converting capital, or a commercial equivalent for capital, into money. And this difficulty expresses itself, among other things, in a high rate of interest. But after the money has been obtained, in what does the second difficulty consist if it is merely a question of paying, has any one any difficulty in getting rid of his money? And if it is a question of buying, where has any one ever had any difficulty in times of crisis in buying anything? Supposing, for the sake of argument, that this should refer to the specific case of a dearth in corn, cotton, etc., this difficulty should become apparent only in the price of these commodities, not in that of money-capital, that is, not in the rate of interest; but the difficulty, so far as it refers to the price of commodities, is overcome by the fact that our man now has the money to buy them.

3760. "But a higher rate of discount is an increased difficulty of obtaining money, is it not?" — "It is an increased difficulty of obtaining money, but it is not the money, the possession of which is essential; it is only the form" [and this form brings profits into the pockets of the banker] "in which the increased difficulty of obtaining capital presents

itself under the complicated relations of a civilised condition."

3763. Overstone's reply: "The banker is the middle man, who receives on one side deposits, and on the other side uses these deposits by entrusting them, *in the form of capital*, to the hands of persons, who etc."

Here we have at last what *he* calls capital. He converts money into capital by "entrusting" it, or, less euphemistically, by loaning it out at interest.

After Mr. Overstone has stated, that a change in the rate of discount is not essentially connected with a change in the quantity of gold reserve in the bank, or in the quantity of available money, but that there is at best only a coincidence in time, he repeats:

3804. "If the money in the country is reduced by export, its value rises, and the Bank of England must adapt itself to this change in the value of money;" [that is, the value of money as *capital*, in other words, the rate of interest, for the value of money as *money*, compared with commodities, remains the same] "this is technically expressed by the words, that it raises the rate of interest."

3819. "I never throw the two together." Meaning money and capital, for the simple reason, that he never distinguishes them.

3834. "The very large sum, which had to be paid out for the necessary subsistence of the country [for corn in 1847] and *which was, indeed, capital.*"

3841. "The fluctuations in the rate of discount have doubtless a very close connection to the condition of the gold reserve [of the Bank of England], for the condition of the gold reserve is the indicator of the increase or decrease of the quantity of money existing in a country; and in proportion as the money in a country increases or decreases, the value of money falls or rises, and the bank rate of discount will adapt itself to that." — Here, then, he admits what he denied once for all in No. 3755 — 3842. "There is a close connection between the two." Meaning between the quantity of gold in the issue department and the reserve of notes in

the banking department. Here he explains the change in the rate of interest by the change in the quantity of money. But what he says is wrong. The reserve may decrease, because the circulating money in the country may increase. This is the case, when the public takes more notes and the metal reserve does not decrease. But in that case the rate of interest rises, because then the banking capital of the Bank of England is limited by the Acts of 1844. But he dare not mention this, since this law provides, that these two departments shall not have anything in common.

3859. "A high rate of profit will always create a great demand for capital; a great demand for capital will raise its value." — Here, we have at last the connection between a high rate of profit and a demand for capital, as Overstone conceives it. Now, a high rate of profit prevailed in 1844–45, for instance, in the cotton industry, because raw cotton was and remained cheap while the demand for cotton goods was strong. The value of capital [and according to a previous statement Overstone calls capital that which every one needs in his business], in the present case the value of raw cotton, was not increased for the manufacturer. Now the high rate of profit may have induced some cotton manufacturer to take up money for the expansion of his business. Thereby the demand for *money-capital* rose, and nothing else.

3889. "Gold may be money or not, just as paper may be a bank note or not."

3896. "Do I understand you correctly, then, that you abandon the statement, which you applied in 1840, to the effect that fluctuations in the circulating notes of the Bank of England should be governed by the fluctuations in the quantity of the gold reserve?" — "I abandon it in so far. . . . that according to the present condition of our knowledge we must add to the circulating notes those other notes, which are deposited in the bank reserve of the Bank of England." — This is superlative. The arbitrary provision, that the bank may make out as many paper notes as it has gold in the treasury and 14 millions more, implies, of course, that its issue of notes fluctuates with the fluctuations of the gold

reserve. But since "the present condition of our knowledge" shows clearly, that the mass of notes, which the bank can manufacture according to this (and which the issue department transfers to the banking department), and which circulating between the two departments of the Bank of England and fluctuate with the fluctuations of its gold reserve, does not determine the circulation of bank notes outside of the walls of the Bank of England, and this last circulation becomes a matter of indifference for the administration of the bank, and the circulation between the two departments of the bank, which shows its difference from the real circulation in the reserve, becomes alone essential. For the outside world this internal circulation is significant only, because the reserve indicates, how close the bank is getting to the legal maximum of its issue of notes, and how much the customers of the bank can still receive from the banking department.

The following is a brilliant example of Overstone's bad faith:

4243. "Does the quantity of capital fluctuate, in your own opinion, to such an extent from one month to another, that its value is changed thereby in the way that we have observed during the last years in the fluctuations of the rate of discount?" — "The proportion between demand and supply of capital may undoubtedly fluctuate even in short intervals. . . . If France announces to-morrow, that it will take up a very large loan, it will undoubtedly cause at once a great change in the *value of money, that is, the value of capital,* in England."

4245. "If France announces, that it will suddenly need 30 millions worth of commodities for some purpose or other, a great demand will arise for *capital*, to use the more scientific and simpler expression."

4246. "*The capital,* which France might want to buy with its loan, is *one* thing; the *money*, with which France buys this, is *another* thing; is it the *money*, which changes its value, or not?" — "We are coming back to the old question, and that, I believe, is better suited for the study

room of a scientist than for this committee room." — And with this he retires, but not into the study room.[85]

CHAPTER XXVII.

THE ROLE OF CREDIT IN CAPITALIST PRODUCTION.

The general remarks, which the credit system so far elicited from us, were the following:

I. Its necessary development, for the purpose of procuring the compensation of the rate of profit, or the movements of this compensation, upon which the entire capitalist production rests.

II. Reduction of the cost of circulation.

1) One of the principal expenses of the circulation is money itself, so far as its represents value itself. It is economized by credit in three ways.

A. It is entirely eliminated in a large portion of the transactions.

B. The circulation of the circulating medium is accelerated.[86] This coincides partly with the statements to be

[85] Further remarks on Overstone's confusion of terms in the matter of capital will be found at the close of chapter XXXII.

[86] The average circulation of notes of the Bank of France was 106,538,000 francs in 1812 and 101,205,000 francs in 1818; while the circulation of money, the total amount of all receipts and payments, was 2,837,712,000 francs in 1812 and 9,665,030,000 francs in 1818. The activity of the circulation in France in 1818 compared to that of 1812 was, therefore, as 3 to 1. The great regulator of the velocity of the circulation is credit. . . . This explains, why a heavy pressure on the money-market generally coincides with a full circulation." (*The Currency Question Reviewed,* etc., p. 165.) "Between September, 1833, and September, 1843, nearly 300 banks were established in Great Britain, which issued their own notes; the consequence was a restriction of the circulation of notes by two and a half millions; it was 36,035,244 pounds sterling at the end of September, 1833, and 33,518,544 pounds sterling at the end of September, 1843." (L. c., p. 53.) "The wonderful activity of the Scotch circulation enables it to transact with 100 pounds sterling the same amount of business, which requires 420 pounds sterling in England." (L. c., p. 55. This last statement refers only to the technical side of the operation.)

made under 2). On one hand, the acceleration is technical; that is, with the same number and quantity of actual transfers of commodities for consumption, a smaller quantity of money or tokens of money performs the same service. This is connected with the technique of the banking business. On the other hand, credit accelerates the velocity of the metamorphoses of commodities and thereby the velocity of the circulation of money.

C. Replacement of gold money by paper.

2) Acceleration, by credit, of the individual phases of circulation or of the metamorphoses of commodities, and with it an acceleration of the process of reproduction in general. (On the other hand credit permits keeping the acts of buying and selling farther apart and thus serves as a basis for speculation.) Contraction of the reserve funds, which may be studied from two sides; on one side as a reduction of the circulating medium, on the other as a reduction of that part of capital, which must always exist in the form of money.[87]

III. Formation of stock companies. By means of these:

1) An enormous expansion of the scale of production and enterprises, which were impossible for individual capitals. At the same time such enterprises as were formerly carried on by governments are socialised.

2) Capital, which rests on a socialised mode of production and presupposes a social concentration of means of production and labor-powers, is here directly endowed with the form of social capital (a capital directly associated individuals) as distinguished from private capital, and its enterprises assume the form of social enterprises as distinguished from individual enterprises. It is the abolition of capital as private property within the boundaries of capitalist production itself.

3) Transformation of the actually functioning capitalist into a mere manager, an administrator of other people's capi-

[87] "Before the establishment of banks the amount of capital required for the function of the circulating medium was always greater than the actual circulation of commodities demanded." *Economist*, 1845, p. 338.

tal, and of the owners of capital into mere owners, mere money-capitalists. Even if the dividends, which they receive, include the interest and profits of enterprise, that is, the total profit (for the salary of the manager is, or is supposed to be, a mere wage of a certain kind of skilled labor, the price of which is regulated in the labormarket, like that of any other labor), this total profit is henceforth received only in the form of interest, that is, in the form of a mere compensation of the ownership of capital, which is now separated from its function in the actual process of reproduction in the same way, in which this function, in the person of the manager, is separated from the ownership of capital. The profit now presents itself (and not merely that portion of it, which derives its justification as interest from the profit of the borrower) as a mere appropriation of the surplus-labor of others, arising from the transformation of means of production into capital, that is, from its alienation from its actual producer, from its antagonism as another's property opposed to the individuals actually at work in production, from the manager down to the last day laborer.

In the stock companies the function is separated from the ownership of capital, and labor, of course, is entirely separated from the ownership of means of production and of surplus-labor. This result of the highest development of capitalist production is a necessary transition to the reconversion of capital into the property of the producers, no longer as the private property of individual producers, but as the common property of associates, as social property outright. On the other hand it is a transition to the conversion of all functions in the process of reproduction, which still remain connected with capitalist private property, into mere functions of the associated producers, into social functions.

Before we proceed any further, we call attention to the following fact, which is economically important: Since profit here assumes purely the form of interest, enterprises of this sort may still be successful, if they yield only interest, and this is one of the causes, which stem the fall of the rate of profit, since these enterprises, in which the constant capital

is so enormous compared to the variable, do not necessarily come under the regulation of the average rate of profit.

[Since Marx wrote the above, new forms of industrial enterprises have developed, which represent the second and third degree of stock companies. The daily increasing speed, with which production may to-day be intensified on all fields of great industry, is offset on the other hand by the ever increasing slowness, with which the markets for these increased products expand. What the great industries turn out in a few months, can scarcely be absorbed by the markets in years. Add to this the system of protective tariffs, by which every industrial country shuts itself off from all others, particularly from England, and which increases home production still more by artificial means. The results are a chronic overproduction, depressed prices, falling or disappearing profits; in short, the long cherished freedom of competition has reached the end of its tether and is compelled to announce its own palpable bankruptcy. This is shown by the fact, that the great captains of industry of a certain line meet for the joint regulation of production by means of a kartel. A committee determines the quantity to be produced by each establishment and distributes ultimately the incoming orders. In some cases even international kartels were formed temporarily, for instance, one uniting the English and German iron producers. But even this form of socialisation did not suffice. The antagonism of interests between the individual firms broke through the agreement quite frequently and restored competition. This led in some lines, where the scale of production permitted it, to the concentration of the entire production of this line in one great stock company under one joint management. In America this has been accomplished several times; in Europe the greatest illustration is so far the United Alkali Trust, which has brought the entire Alkali production of the British into the hands of one single business firm. The former owners of the individual works, more than thirty, have received the tax value of their entire establishment in shares of stock, totalling about 5 million pounds sterling, which represent the fixed capital of the trust. The

technical management remains in the same hands, but the business management is centralised in the hands of the general management. The floating capital, amounting to about one million pounds, was offered to the public for subscription. The total capital is, therefore, 6 million pounds sterling. In this way competition in this line, which forms the basis of the entire chemical industry, has been replaced in England by monopoly, and the future expropriation of this line by the whole of society, the nation, has been well prepared.—F. E.]

This is the abolition of the capitalist mode of production within capitalist production itself, a self-destructive contradiction, which represents on its face a mere phase of transition to a new form of production. It manifests its contradictory nature by its effects. It establishes a monopoly in certain spheres and thereby challenges the interference of the state. It reproduces a new aristocracy of finance, a new sort of parasites in the shape of promoters, speculators and merely nominal directors; a whole system of swindling and cheating by means of corporation juggling, stock jobbing, and stock speculation. It is private production without the control of private property.

IV. Aside from the stock company business, which represents an abolition of capitalist private industry on the basis of the capitalist system itself and destroys private industry in proportion as it expands and seizes new spheres of production, credit offers to the individual capitalist, or to him who is regarded as a capitalist, absolute command of the capital of others and the property of others, within certain limits, and thereby of the labor of others.[88] A command of social

[88] See, for instance, in the *Times* the list of business failures of a critical year like 1857, and compare the private property of the bankrupts with the amount of their debts. "In truth the purchasing power of people, who have capital and credit, exceeds by far anything conceivable by those who have no practical acquaintance with speculative markets." (Tooke, *Inquiry into the Currency Principle*, p. 73.) "A man who has the reputation of having enough capital for his regular business, and who enjoys good credit in his line, if he has sanguine ideas concerning the rising constellation of the articles carried by him, and if he is lucky in the beginning and course of his speculation, may make purchases of a truly enormous extent compared to his capital" (Ibidem, p. 136). "The manufacturers, merchants, etc., all carry on transactions which exceed their capital by far . . . Capital is to-day rather the basis, on which a good credit is built up, than the limit of the transaction of any commercial business." (*Economist*, 1847, p. 333.)

capital, not individual capital of his own gives him command of social labor. The capital itself, which a man really owns, or is supposed to own by public opinion, becomes purely a basis for the superstructure of credit. This is true particularly of wholesale commerce, through whose hands the greatest portion of the social product passes. All standards of measurement, all excuses which are more or less justified under capitalist production, disappear here. What the speculating wholesale merchant risks is social property, not his own. Equally stale becomes the phrase concerning the origin of capital from saving, for what he demands is precisely that others shall save for him. [In this way all France saved recently one and a half billion francs for the Panama Canal swindlers. In fact the entire Panama swindle is here correctly described, fully twenty years before it happened.—F. E.] The other phrase of the abstention is slapped in the face by his luxury, which now becomes a means of credit by itself. Conceptions, which still have some meaning on a less developed stage of capitalist production, become quite meaningless here. Both success and failure lead now simultaneously to a centralisation of capital, and thus to an expropriation on the most enormous scale. This expropriation extends here from the direct producers to the smaller and smallest capitalists themselves. It is first the point of departure of the capitalist mode of production; its complete accomplishment is the aim of this production. In the last instance it aims at the expropriation of all individuals from the means of production, which cease with the development of social production to be means of private production and products of private production, and which can henceforth be only means of production in the hands of associated producers, their social property, just as they are social products. However, this expropriation appears under the capitalist system in a contradictory form, as an appropriation of social property by a few; and credit gives to these few more and more the character of pure adventurers. Since property here exists in the form of shares of stock, its movements and transfer become purely a result of gambling at the stock exchange,

where the little fish are swallowed by the sharks and the lambs by the wolves. In the stock companies the antagonism against the old form becomes apparent, in which social means of production are private property; but the conversion to the form of shares of stock still remains ensnared in the boundaries of capitalism; hence, instead of overcoming the antagonism between the character of wealth as a social one and as private wealth, the stock companies merely develop it in a new form.

The co-operative factories of the laborers themselves represent within the old form the first beginnings of the new, although they naturally reproduce, and must reproduce, everywhere in their actual organisation all the shortcomings of the prevailing system. But the antagonism between capital and labor is overcome within them, although only in the form of making the associated laborers their own capitalists, that is, enabling them to use the means of production for the employment of their own labor. They show the way, in which a new mode of production may naturally grow out of an old one, when the development of the material forces of production and of the corresponding forms of social production has reached a certain stage. Without the factory system arising out of the capitalist mode of production the co-operative factory could not develop, nor without the credit system arising out of the same mode of production. The credit system is not only the principal basis for the gradual transformation of capitalist private enterprises into capitalist stock companies, but also a means for the gradual extension of co-operative enterprises on a more or less natural scale. The capitalist stock companies as well as the co-operative factories may be considered as forms of transition from the capitalist mode of production to the associated one, with this distinction, that the antagonism is met negatively in the one, positively in the other.

So far we have considered the development of the credit system, and the latent abolition of capitalist property implied by it, mainly with reference to industrial capital. In the following chapters we shall consider credit with reference to interest-bearing capital as such, both the effect of interest

on this capital and the form which it assumes thereby; and on this point we shall have to make a few more specific remarks of economic significance.

For the present we have this to say:

The credit system appears as the main lever of overproduction and overspeculation in commerce solely because the process of reproduction, which is elastic in its nature, is here forced to its extreme limits, and is so forced for the reason that a large part of the social capital is employed by people who do not own it and who push things with far less caution than the owner, who carefully weighs the possibilities of his private capital, which he handles himself. This simply demonstrates the fact, that the production of values by capital based on the antagonistic nature of the capitalist system permits an actual, free, development only up to a certain point, so that it constitutes an immanent fetter and barrier of production, which are continually overstepped by the credit system.[89] Hence the credit system accelerates the material development of the forces of production and the establishment of the world market. To bring these material foundations of the new mode of production to a certain degree of perfection, is the historical mission of the capitalist system of production. At the same time credit accelerates the violent eruptions of this antagonism, the crises, and thereby the development of the elements of disintegration of the old mode of production.

Two natures, then, are immanent in the credit system. On one side, it develops the incentive of capitalist production, the accumulation of wealth by the appropriation and exploitation of the labor of others, to the purest and most colossal form of gambling and swindling, and reduces more and more the number of those, who exploit the social wealth. On the other side, it constitutes a transition to a new mode of production. It is this ambiguous nature, which endows the principal spokesmen of credit from Law to Isaac Pereire with the pleasant character of swindlers and prophets.

[89] Th. Chalmers.

CHAPTER XXVIII.

THE MEDIUM OF CIRCULATION (CURRENCY) AND CAPITAL. TOOKE'S AND FULLARTON'S CONCEPTION.

The distinction between currency and capital, drawn by Tooke,[90] Wilson, and others, which indiscriminately confounds the differences between the medium of circulation as money, as money-capital, and as interest-bearing capital (moneyed capital in English parlance), refers to two things.

The currency circulates on the one hand as *coin* (money), so far as it promotes the *expenditure of revenue,* in the transactions between the individual consumers and the retail merchants. In this category belong all merchants, who sell to the consumers, that is, the individual consumers as distinguished from the productive consumers or producers. Here money circulates in the function of coin, although it continually *replaces*

[90] The business of bankers, setting aside the issue of promissory notes payable on demand, may be divided into two branches, corresponding with the distinction pointed out by Dr. (Adam) Smith of the transactions between dealers and dealers, and between dealers and consumers. One branch of the bankers' business is to collect *capital* from those who have no immediate employment for it, and to distribute or transfer it to those who have. The other branch is to receive deposits of the *incomes* of their customers, and to pay out the amount, as it is wanted for expenditure by the latter in the objects of their consumption. . . . the former being a circulation of *capital,* the latter of currency." Tooke, *Inquiry into the Currency Principle,* p. 36. The former is "the concentration of capital on the one hand and the distribution of it on the other," the latter is "administering the circulation for local purposes of the district." Ibidem, p. 37. The correct conception is far more approached in the following passage from Kinnear: "Money is used to accomplish two essentially different operations. As a medium of exchange between dealer and dealer it is the instrument, by which transfers of capital are accomplished; that is, the exchange of a certain amount of capital in money for an equal amount of capital in commodities. But money expended in the payment of wages and in the purchase and sale between dealer and consumer is not capital, but revenue; that portion of the revenue of the community, which is used for daily expenditures. This money circulates continually in daily use, and it is this alone, which is strictly called currency. Advances of capital depend exclusively on the will of the bank or other capitalists, for there are always borrowers to be found; but the amount of currency depends on the needs of the community, within which the money circulates for the purpose of daily expenditure." (J. G. Kinnear, *The Crisis and Currency.* London, 1847.)

capital. A certain portion of the money in a certain country is continually devoted to this function, although this portion consists of perpetually varying pieces of individual coin. On the other hand, so far as money promotes the *transfer of capital*, either as a means of purchase (means of circulation), or as a means of payment, it is *capital.* It is, therefore, neither its function as a means of purchase, nor that as a means of payment, which distinguishes it from coin, for it may act as a means of purchase also between dealer and dealer, so far as they buy on cash terms from one another, and it may serve as a means of payment also between dealer and consumer, so far as credit is given and the revenue consumed before it is paid. The difference, then, is in fact that between the *money-form of revenue* and the *money-form of capital,* but not that between currency and capital, for a certain quantity of money *circulates* in the transactions between dealers as well as those between consumers and dealers. It is, therefore, equally a *currency* (circulation) in *both* functions. In Tooke's conception, confusion is introduced into this question in various ways.

1) By confounding the definite distinctions of the two functions;

2) By intermingling with it the question of the quantity of money circulating together in both functions;

3) By intermingling with it the question of the relative proportions of the quantities of currency circulating in the two functions, and thus in the two spheres of the process of reproduction.

I. *Confounding the Definite Distinctions.*

Money is said to be currency in the one form, and capital in the other. To the extent that money serves in the one or the other function, be it for the realisation of revenue or the transfer of capital, it performs its duty in buying and selling or in paying, as a means of purchase or payment, and in the wider meaning of the word as currency. The further purposes, to which it is devoted in the accounts of its spender or recipient, who may use it as capital or revenue, do not alter

anything in this matter, and this is demonstrated by two facts. Although the kinds of money circulating in the two spheres are different, yet the same price of money, for instance a five pound note, passes from one sphere to the other and performs alternately both functions; this is inevitable for the simple reason, that the retail merchant can give to his capital the form of money which he receives from customers. It may be assumed, that the small change has its center of gravitation in the domain of retail trade; the retail dealer needs it continually to give change and receives it back continually in the payments of his customers. But he also receives money, that is, coin in that metal, which serves as a standard of value, for instance, in England one pound coins, or even bank notes, particularly notes of small denominations, such as five and ten pound notes. These gold coins and notes, with whatever small change he has to spare, are deposited by the retail dealer every day, or every week, in his bank, and he pays for his purchases by drawing checks on his deposits. But the same gold coins and bank notes are continually withdrawn from the bank, indirectly or directly (for instance, small change by manufacturers for the payment of wages), by the entire public in its capacity as consumer, and flow continually back to the retail dealers, for whom they realise in this way a portion of their capital, and at the same time their revenue, again and again. This last circumstance is important, and it is wholly overlooked by Tooke. Only where money is expended as money-capital, in the beginning of the process of reproduction (Book II, Part I), does capital-value exist purely as such. For in the produced commodities there is contained not merely capital, but also surplus-value; they are not capital alone, but also newly produced capital, capital pregnant with the source of revenue. What the retail dealer gives away for the money returning to him, his commodities, constitutes for him capital plus profit, capital plus revenue.

Furthermore, the circulating small change, when returning to the retail dealer, rehabilitates for him the money-form of his capital.

The difference between circulation as a circulation of revenue and a circulation of capital cannot, therefore, be presented as a difference between currency and capital without creating confusion. This mode of expression is due in the case of Tooke to the fact, that he simply places himself in the position of a banker issuing his own bank notes. The amount of his notes, which is continually in the hands of the public and serves as currency (even if consisting of ever different notes) costs him nothing but paper and printing. They are circulating certificates of indebtedness made out in his own name (bills of exchange), but they bring him money and thus serve as a means of expanding his capital. But they differ from his capital, whether this be his own or borrowed capital. This implies for him a specific distinction between currency and capital, which, however, has nothing to do with the definite definition of terms as such, least of all with those made by Tooke in this case.

The different terms denoting specific functions — whether it be the money form of revenue or of capital — do not change anything in the primal character of money as a medium of circulation; it retains this character, no matter whether it performs the one function or the other. It is true, that money serves more as a medium of circulation in the strict meaning of the term (coin, means of purchase) in its character as the money-form of revenue, on account of the incoherency of the purchases and sales, and because the majority of the spenders of revenue, the laborers, can buy relatively little on credit, while in the transactions of the business world, where the medium of circulation constitutes the money-form of capital, money serves mainly as a means of payment, partly on account of the concentration, partly on account of the prevailing credit system. But the distinction between money as a means of payment and a means of purchase (currency) refers to money itself; it is not a distinction between money and capital. The distinction is not one between currency and capital, merely because more copper and silver circulates in the retail business, and more gold in wholesale business,

so that there is a difference between copper and silver on one side, and gold on the other.

II. *Introducing the Question of the Quantity of Money Circulating Together in Both Functions.*

To the extent that money circulates, either as a means of purchase or as a means of payment, no matter in which one of the two spheres and independently of its function of realising revenue or capital, the quantity of its circulating mass is regulated by the laws developed previously in the discussion of the simple circulation of commodities, Book I, Chapter III, 2 b. The degree of the velocity of circulation, in other words, the number of repetitions of the same function as means of purchase and payment by the same pieces of money in a given period of time, the mass of simultaneous purchases and sales, or payments, the sum of the prices of the circulating commodities, finally the balances of payments to be spared in the same period, determine in either case the mass of the circulating money, of currency. Whether the money so serving represents capital or revenue for the paying or receiving party, is immaterial, and does not alter the matter in any way. Its mass is simply determined by its function as a medium of purchase and payment.

III. *Introduction of the Question of the Relative Proportions of the Quantities of Currency Circulating in Both Functions and Thus in Both Spheres of the Process of Reproduction.*

Both spheres of circulation are connected internally, for on the one hand the mass of the revenues to be spent expresses the volume of consumption, and on the other hand the magnitude of the masses of capital circulating in production and commerce express the volume and velocity of the process of reproduction. Nevertheless the same circumstances have a different effect, working even in opposite directions, upon the quantities of the money circulating in both spheres or functions, or on the quantities of currency, as the English

express it in banking parlance. And this gives a new justification for the absurd distinction of Tooke between capital and currency. The fact, that the gentlemen of the Currency Theory confound two different things, is by no means a good reason for making two different conceptions out of this confusion.

In times of prosperity, great expansion, acceleration and intensity of the process of reproduction, the laborers are fully employed. Generally there is also a rise of wages which makes in a slight measure for their fall below the average level in the other periods of the commercial cycle. At the same time the revenue of the capitalists grow considerably. Consumption increases universally. The prices of commodities also rise regularly, at least in various essential lines of business. Consequently the quantity of the circulating money grows at least within certain limits, since the increasing velocity draws certain barriers around the quantity of the currency. Since that portion of the social revenue, which consists of wages, is originally advanced by the industrial capitalist in the form of variable capital, and always in the form of money, he requires more money in times of prosperity for his circulation. But we must not take this into account twice. We must not count it first as money required for the circulation of the variable capital, and a second time as money required for the circulation of the revenue of the laborers. The money paid to the laborers as wages is spent in retail trade and returns about once a week as a deposit of the retail dealers to the banks, after it has negotiated various intermediary deals in smaller cycles. In times of prosperity the reflux of money proceeds smoothly for the industrial capitalists, and thus the need of money facilities does not increase for the reason that they have to pay more wages, but rather require more money for the circulation of their variable capital.

The final result is, that the mass of currency required for the expenditure of revenue increases decidedly in periods of prosperity.

As for the currency, which is necessary for the transfer

of capital for the exclusive use of the capitalists, a period of brisk business is at the same time a period of most elastic and easy credit. The velocity of currency between capitalist and capitalist is regulated directly by credit, and the mass of the currency required for the making of payments and even for cash purchases decreases proportionately. It may increase absolutely, but it decreases under these circumstances relatively, compared to the expansion of the process of reproduction. On the one hand greater amounts of payments are handled without the intervention of any money at all; on the other hand, owing to the great vivacity of the process, the same quantities of money have a greater velocity, both as means of purchase and payment. The same quantity of money promotes the reflux of a greater number of individual capitals.

On the whole, the currency of money in such periods appears full, although its second portion (the transfer of capital) is at least relatively contracted, while its first portion (the expenditure of revenue) is absolutely expanded.

The refluxes express the reconversion of commodity-capital into money, M — C — M′, as we have seen in the discussion of the process of reproduction in Volume II, Part I. Credit renders the reflux in the form of money independent of the time of actual reflux, both for the industrial capitalist and the merchant. Both of them sell on credit; their commodities are gotten rid of, before they resume for them the form of money by returning them really in this form. On the other hand they buy on credit, and in this way the value of their commodities is reconverted either into productive capital or commodity-capital even before this value has been transformed into real money, before the price of commodities is due and paid for. In such periods of prosperity the reflux passes off smoothly and easily. The retail dealer pays the wholesale dealer in collateral, the wholesaler pays the manufacturer in the same way, the manufacturer in like manner the importer of the raw material, and so forth. The appearance of rapid and more secure turn-overs maintains itself always for a certain period after they are past in reality, since the turn-

overs of credit take the place of the real ones as soon as credit is well under way. The banks begin to scent danger, as soon as their customers deposit more bills of exchange than money. See the above testimony of the Liverpool bank director.

On a previous occasion I have remarked: "In periods of prevailing credit, the rapidity of circulation of money grows faster than the prices of commodities, while in times of declining credit the prices of commodities fall slower than the rapidity of circulation." (*Critique of Political Economy*, 1859, p. 135–136.)

In a period of crisis the condition is reversed. Circulation No. I contracts, prices fall, likewise wages of labor; the number of employed laborers is reduced, the mass of transactions decreases. On the other hand, the need of accommodation in the matter of money increases in circulation No. II in proportion as credit decreases. We shall return to this point immediately.

There is no doubt that, with the decrease of credit which goes with the clogging of the process of reproduction, the mass of circulation No. I required for the expenditure of revenue is contracted, while that of No. II required for the transfer of capital is expanded. But it remains to be analysed, to what extent this statement coincides with the following maintained by Fullarton and others: "A demand for capital on loan and a demand for additional circulation are quite distinct things, and not often found associated." (Fullarton, l. c. p. 82, title of chapter 5.) [91]

[91] "It is a great error, indeed, to imagine that the demand for pecuniary accommodation (i.e. for the loan of capital) is identical with a demand for additional means of circulation, or even that the two are frequently associated. Each demand originates in circumstances peculiarly affecting itself, and very distinct from one another. It is when everything looks prosperous, when wages are high, prices on the rise, and factories busy, that an additional supply of currency is usually required to perform the additional functions inseparable from the necessity of making larger and more numerous payments; whereas it is chiefly in a more advanced stage of the commercial cycle, when difficulties begin to present themselves, when markets are overstocked, and returns delayed, that interest rises, and a pressure comes upon the Bank for advances of capital. It is true that there is no medium through which the Bank is accustomed to advance capital except that of promissory notes; and that, to refuse the notes, therefore, is to refuse the accommodation. But the accommodation once granted, everything adjusts itself in conformity with the necessities of the market; the loan remains, and the currency, if not wanted, finds its way back to the issuer. Accordingly, a very slight

In the first place it is evident, that in the first of the two cases mentioned above, during times of prosperity, when the mass of the circulating medium increases, the demand for it must also increase. But it is likewise evident, that a manufacturer, who draws more or less of his deposit out of a bank in gold or banknotes, because he has more capital to expand in the form of money, does not increase his demand for capital, but merely his demand for this particular form, in which his capital is expended. The demand refers only to the technical form, in which his capital is thrown into circulation. It is well known that a different development of the credit system implies for the same variable capital, or the same

examination of the Parliamentary Returns may convince any one, that the securities in the hand of the Bank of England fluctuate more frequently in an opposite direction to its circulation than in concert with it, and the example, therefore, of that great establishment furnishes no exception to the doctrine so strongly pressed by the country bankers, to the effect that no bank can enlarge its circulation, if that circulation be already adequate to the purposes to which a banknote currency is commonly applied; but that every addition to its advances, after that limit is passed, must be made from its capital, and supplied by the sale of some of its securities in reserve, or by abstinence from further investment of such securities. The table compiled from the Parliamentary Returns for the interval between 1833 and 1840, to which I have referred in a preceding page, furnishes continued examples of this truth; but two of these are so remarkable that it will be quite unnecessary for me to go beyond them. On the third of January, 1837, when the resources of the Bank were strained to the uttermost to sustain credit and meet the difficulties of the money-market, we find its advances on loan and discount carried to the enormous sum of 17,022,000 pounds sterling, an amount scarcely known since the war, and almost equal to the entire aggregate issues which, in the meanwhile, remain unmoved at so low a point as 17,076,000 pounds sterling! On the other hand, we have, on the fourth of June, 1833, a circulation of 18,892,000 pounds sterling, with a return of private securities in hand, nearly, if not the very lowest on record for the last half-century, amounting to no more than 972,000 pounds sterling!" (Fullarton, l. c., pages 97 and 98.) That a demand for pecuniary accommodation need not be identical by any means with a demand for gold (what Wilson, Tooke and others call capital) may be seen by the following testimony of Mr. Weguelin, Governor of the Bank of England): "The discounting of bills to this amount" (one million per day for three successive days) "would not reduce the reserve" (of banknotes), unless the public should demand a greater amount of active circulation. The notes issued in the discounting of bills would flow back by way of banks and by means of deposits. Unless such transactions have for their purpose the export of gold, or unless a panic reigns in the inland market, of such character as to cause the public to hold on to the notes instead of depositing them in the banks, the reserve would not be touched by such tremendous transactions. "The Bank can discount one and a half millions daily, and this takes place continually, without touching its reserve in the least. The notes come back as deposits, and the only change that takes place is the mere transfer from one account to the other." (*Report on Bank Acts*, 1857.) Evidence No. 241,500. The notes serve here merely as means of transferring credit accounts.

quantity of wages, a greater mass of means of circulation (currency) in one country than in another, for instance, more in England than in Scotland, more in Germany than in England. In like manner the same capital invested in agriculture, in the process of reproduction, requires different quantities of money in different seasons for the performance of its function.

But the contrast drawn by Fullarton is not correct. It is by no means the strong demand for loans, as he says, which distinguishes the period of depression from that of prosperity, but the ease with which this demand is satisfied in periods of prosperity, and the difficulties which it meets after a depression has become a fact. It is precisely the enormous development of the credit system during a period of prosperity, hence also the enormous development of the demand for loan capital and the readiness with which the supply meets it in such periods, which brings about a shortage of credit during the period of depression. It is not, therefore, the difference in the size of the demand for loans which characterises both periods.

As we have remarked previously, both periods are primarily distinguished by the fact that in periods of prosperity the demand for currency between consumers and dealers predominates, and in periods of depression that for currency between capitalists. In a period of depression the former decreases, the latter increases.

What appears as the essential mark to Fullarton and others is the phenomenon, that in such periods, in which the securities in the hand of the Bank of England are on the increase, its circulation of notes is decreasing, and vice versa. Now the level of the securities expresses the volume of the pecuniary accommodation, the volume of the discounted bills of exchange and of the advances on marketable collateral. Thus Fullarton says in the above passage (footnote 91) that the securities in the hands of the Bank of England vary generally in the opposite direction from its circulation of banknotes, and this corroborates the doctrine long held by private banks to the effect that no bank can increase its issue of banknotes

beyond a certain point determined by the needs of the public; but if a bank wants to make advances beyond this limit, it must take them out of its capital, that is, it must either realise on securities or utilise deposits which it would otherwise have invested in securities.

This reveals at the same time what Fullarton means by capital. What does capital signify here? It means that the bank can no longer make advances with its own banknotes, promissory notes that cost it nothing, of course. But what does it make payments with in that case? With the sums realised by the sale of securities in reserve, that is, government bonds, stocks, and other interest-bearing papers. And what is this money that it gets in return for the sale of such papers? Gold or banknotes, so far as the last named are legal tender, such as those of the Bank of England. What the bank advances, is under all circumstances money. This money now constitutes a part of its capital. This is evident in the case that it advances gold. If it advances notes, then these notes represent capital, because it has given up since actual value, interest-bearing papers, for them. In the case of private banks the notes secured by them through the sale of securities cannot be anything else, in the main, but notes of the Bank of England or their own notes, since others would hardly be taken in payment for securities. If it is the Bank of England itself, its own notes, which it receives in return, cost it capital, that is, interest-bearing papers. By this means it withdraws its own notes from the circulation. If it reissues these notes, or issues new ones in their stead to the same amount, they represent capital. And they do so, equally well, when such notes are used for advances to capitalists, or when they are used later on for investment in securities, as soon as the demand for such pecuniary accommodation decreases. In all these cases the term capital is employed only from the banker's point of view, and it means that the banker is compelled to loan more than his mere credit.

It is well known that the Bank of England makes all its advances in its own notes. Now, if the bank note circula-

tion of this Bank decreases nevertheless in proportion as the discounted bills of exchange and collateral in its hands, and thus its advances, increase — what becomes of the notes thrown into circulation by it, how do they return to the Bank?

If the demand for money accommodation arises from an unfavorable national balance of trade and implies an export of gold, the matter is very clear. The bills of exchange are discounted in banknotes. The banknotes are exchanged by the bank itself, in its issue department, which issues gold for them, and this gold is exported. It is as though it were to pay out gold directly, without the intervention of notes, on discounting the bills. Such an increased demand, which may amount to from seven to ten million pounds sterling, naturally does not add a single five-pound note to the inland circulation of the country. Now, if it is said, that the Bank of England advances capital in this case, but not currency, it may mean two things. In the first place it may mean, that the bank does not advance credit, but actual values, a part of its own capital, or of capital deposited with it. In the second place it may mean that it does not advance money for inland, but for international circulation. It advances world money, and money for this purpose must always assume the form of a hoard in its metallic body. In this shape money does not merely represent the form of value, but value itself, whose money-form it is. Although this gold represents capital, both for the bank and the exporting money dealer, both financial and commercial capital, yet the demand for it does not come as a demand for capital, but as a demand for the absolute form of money-capital. This demand arises precisely at the moment, when the foreign markets are overcrowded with unsalable English commodity-capital. What is wanted, then, is capital, but not in its capacity as *capital*. What is wanted is capital in the shape of *money*, in the shape in which money serves as international world money; and this is its original form of precious metal. The exports of gold are not, as Fullarton, Tooke, etc., claim, a mere question of capital. They are a question of money, even if this be

money in one specific function. The fact that it is not a question of *inland* currency, as the advocates of the Currency Theory maintain, does not prove, as Fullarton and others think, that it is a question of mere capital. It is a question of money in the form in which money is an international means of payment. "Whether that capital" (that is, the purchase price for the one million quarters of foreign wheat required after a crop failure in the home country) "is transmitted in merchandise or in specie, is a point which in no way affects the nature of the transaction," (Fullarton, l. c., p. 131) but affects essentially the question, whether an export of gold takes place or not. Capital is transferred in the form of precious metals, because it either cannot be transferred at all in the shape of commodities, or only at a great loss. The fear, which the modern banking system has of gold exports, exceeds anything ever dreamt by the monetary system, which considered precious metals as the only true wealth. Take, for instance, the following cross-examination of the Governor of the Bank of England, Morris, before the Parliamentary Committee on the crisis of 1847–48: Question 3846. "When I speak of the depreciation of stocks and fixed capital, is it not known to you that all capital invested in papers and products of all kinds was depreciated in the same way, that raw materials, cotton, silk, wool, were sent to the continent at the same cut prices, and that sugar, coffee and tea were auctioned off in forced sales."—"It was inevitable that the nation should make considerable sacrifices, in order to counteract the drain of gold caused by the enormous imports of means of subsistence,"— 3848. "Don't you believe that it would have been better to touch the eight million pounds sterling stored in the vaults of the bank, instead of trying to recover the gold with such sacrifices?" —"I do not believe that."— It is gold which here stands for the only true wealth.

Fullarton quotes the discovery of Tooke, that "with only one or two exceptions, and those admitting of satisfactory explanation, every remarkable fall of the exchange, followed by a drain of gold, that has occurred during the last half

century, has been coincident throughout with a comparatively low state of the circulating medium, and vice versa." (Fullarton, p. 121). This discovery proves that such drains of gold occur generally after a period of excitement and speculation, as "a signal of a collapse already commenced . . . an indication of overstocked markets, of a cessation of the foreign demand for our productions, of delayed returns, and, as the necessary sequel of all these, of commercial discredit, manufactories shut up, artisans starving, and a general stagnation of industry and enterprise." (P. 129.) This is at the same time the best rebuttal of the claim of the advocates of the Currency Theory, that a full circulation drives out bullion and a low circulation attracts it. On the other hand, while the Bank of England generally carries a strong gold reserve during a period of prosperity, this hoard is generally formed during the spiritless and stagnating period, which follows after a storm.

All this wisdom concerning the drains of gold, then, amounts to saying that the demand for *international media* of circulation and payment differs from the demand for *national* media of circulation and payment (and this implies the self-evident fact that "the existence of a drain does not necessarily imply any diminution of the internal demand for circulation," as Fullarton says on page 112 of his work); and that the sending abroad of precious metals and their throwing into international circulation is not identical with the throwing of notes or specie into the internal circulation. For the rest I have shown on a previous occasion, that the movements of a hoard in the shape of a reserve fund for international payments has nothing to do as such with the movements of money as a medium of circulation. It is true that the question is complicated by the fact that the different functions of a hoard, which I have developed from the nature of money, are here placed upon the shoulders of one sole reserve fund, that is, the function of money as a reserve fund for payments of due bills in the interior business; the function of a reserve fund of currency; finally, the function of a reserve fund of world money. It follows from this that

under certain circumstances a drain of gold from the Bank to the internal market may be combined with a like drain to the international market. The question is further complicated by the fact that this reserve fund has been loaded with the additional function of serving as a fund for guaranteeing the convertibility of bank notes in countries, in which the credit system and credit money are developed. And on top of all this comes the concentration of the national reserve fund in one single central bank, and, secondly, its reduction to the smallest possible minimum. This explains Fullarton's plaint (p. 143): "One cannot contemplate the perfect silence and facility with which variations of the exchange usually pass off in continental countries, compared with the state of feverish disquiet and alarm always produced in England whenever the treasure in the bank seems to be at all approaching to exhaustion, without being struck with the great advantage in this respect which a metallic currency possesses."

However, if we leave aside the question of the drain of gold, how can a bank issuing notes, like the Bank of England, increase the amount of the money accommodation granted by it without increasing its issue of bank notes?

So far as the bank itself is concerned, all the notes outside of its walls, whether they circulate or rest in private treasures, are in circulation, that is, not held in its own possession. Hence, if the bank extends its discounting and lombarding business, its advances on securities, all the bank notes issued for that purpose must flow back to it, for otherwise they would increase the volume of circulation, a thing which is not supposed to happen. This return of notes may take place in two ways.

First: The bank pays to A notes for securities; A pays with these notes for bills of exchange due to B, and B deposits these notes once more in this bank. This closes the circulation of these notes, but the loan remains. ("The loan remains, and the currency, if not wanted, finds its way back to the issuer." Fullarton, p. 97.) The notes, which the bank loaned to A, have now returned to it; but it still remains the creditor of A, or whoever may have been drawn

upon by A in discounting his bills, and it remains the debtor of B for the amount of values expressed in these notes, and B thus has a claim upon a corresponding portion of the capital of the bank.

Secondly: A pays to B, and B himself, or C who receives them from B, pays with these notes bills due to the bank, directly or indirectly. In that case the bank is paid in its own notes. This concludes the transaction (excepting the return of this payment by A to the bank).

In what respect, now, shall the loan of the bank to A be regarded as a loan of capital, or as a loan of mere currency? [92]

[This depends on the nature of the loan itself. Three cases must be distinguished.

First Case.— A receives from the bank the amounts loaned on his own personal credit, without giving any security for them. In this case he does not merely receive means of payment, but also without a doubt some new capital, which he may invest and employ as an additional capital in his business until the day of settlement.

Second Case.— A has given to the bank securities, national bonds, or stocks as collateral, and received for them, say, two-thirds of their value in the shape of a cash loan. In this case he has received means of payment needed by him, but no additional capital, for he entrusted to the bank a larger capital-value than he received from it. But this larger capital-value was, on the one hand, unavailable for the momentary needs of A, because it was invested as interest-bearing capital in a certain form and could not serve as means of payment; on the other hand, A had reasons of his own for not wanting to convert this capital-value directly into means of payment by selling it. His securities served, among other ends, as a reserve capital, and to that end he set them in motion. The transaction between A and the bank, therefore, consists in a mutual transfer of capital, but in such a way, that A does not receive any additional capital (on the con-

[92] The passage following here is unintelligible in the original in this connection, and it has been worked over by the editor and inclosed in brackets. In another connection this point has already been touched upon in chapter XXVI.— F. E.

trary, less capital!) although he receives means of payment which he needs. For the bank, on the other hand, this transaction constitutes a temporary fixation of money-capital in the form of a loan, a conversion of money-capital from one form into another, and this conversion is precisely the essential function of the banking business.

Third Case.— A has had a bill of exchange discounted by the bank, and received its value in cash after the deduction of the discount. In this case he has sold to the bank a money-capital which does not represent ready cash for the same amount in the shape of ready cash. He has sold his running bill for cash money. The bill is now the property of the bank. It does not alter the matter that the last endorser of the bill, A, is responsible to the bank for it in default of payment. He shares this responsibility with the other endorsers and with the first writer of the bill, all of whom are responsible to him. In this case, then, we have not any loan to deal with, but only an ordinary sale and purchase. For this reason A has not to make any return payments to the bank. It covers itself by cashing the bill when it becomes due. Here, also, a transfer of capital has taken place between A and the bank, in exactly the same way, which holds good in the sale and purchase of any other commodity, and for this very reason A did not receive any additional capital. What he needed and received were means of payment, and he received them by having the bank convert one form of his money-capital, his bill, into another, money.

It is only the first case, in which there can be any question of a real loan of capital; in the second and third cases the matter can be so regarded only in the sense that every investment of capital implies an *advance of capital.* In this sense the bank advances capital to A; but for A it is *money-capital* at best in the sense that it is a portion of his capital in general. And he does not want and use it as a capital specifically. It is specifically a means of payment for him. Otherwise every ordinary sale of commodities, by which means of payment are secured, might be considered as a loan received. — F. E.]

In the case of private banks issuing notes we have this difference: If its notes remain neither in the local circulation, nor return to it in the form of deposits, or in payment for due bills of exchange, then these notes fall into the hands of people, who compel the private bank to cash these notes in gold or in notes of the Bank of England. In that event its loan represents indeed an advance of notes of the Bank of England, or, what amounts to the same thing for the private bank, of gold, in other words, of a portion of its banking capital. The same holds good in the case that the Bank of England itself, or some other bank, which has a fixed legal maximum for its issue of notes, must sell securities for the purpose of withdrawing its own notes from circulation and giving them out once more in the shape of loans; in that case the bank's own notes represent a portion of its mobilised banking capital.

Even if the circulation were purely metallic, it would be possible, first, that the drain of gold [Marx evidently refers here to a drain of gold that would, at least partially, go to foreign countries.— F. E.] might empty the treasury, while, secondly, its loans on securities might grow considerably, but flow back to it in the form of deposits, or of payments on due bills of exchange (since the gold is principally demanded from the bank for the payment of balances in the settlement of previous transactions); so that, on one side, the total treasure of the bank would be decreasing with an increase of securities in its hands, while it would be holding the same amount, which it possessed formerly as owner, in the capacity of debtor of its customers, who made deposits, and the total quantity of currency would be decreasing.

Our assumption so far has been, that the loans are made in notes, so that they carry with them a momentary, but immediately disappearing, increase of the issue of notes. But this is not necessary. Instead of a paper note, the bank may open a credit account for A, in which case this A, a debtor of the bank, appears in the role of an imaginary depositor. He satisfies his creditors with checks on the bank, and the recipient of these checks passes them on to his own banker, who ex-

changes them for the checks running against him in the clearing house. In this case no intervention of notes takes place at all, and the entire transaction is confined to the fact that the bank collects its own debt in a check drawn on itself, since its actual recompense consists in its claim on A. In this case the bank has loaned to A a portion of its own banking capital, its own credit to him.

To the extent that this demand for pecuniary accommodation is a demand for capital, it is so only for money-capital. It is capital only from the point of view of the banker, namely gold (in the case of gold exports to foreign countries) or notes of the National Bank, which a private bank can obtain only by purchase against securities, and which, therefore, represent capital for it. Or, again, it is a case of interest-bearing papers, government bonds, stocks, etc., which must be sold in order to obtain gold or banknotes. Such papers, however, if they are government bonds, are capital only for the buyer, for whom their purchase price represents a capital invested in them. By themselves they are not capital, but merely claims on loans. If they are mortgages, they are mere claims on future ground rent. And if they are shares of stock, they are mere titles of ownership, which entitle the holder to a share in future surplus-values. All these things are no real capital, they form no constituent parts of capital, nor are they values in themselves. By similar transactions money belonging to the bank may be transformed into deposits, so that the bank, instead of being the owner of this money, owes it to some customer and holds it under a different title of ownership. While this is important as a phenomenon for the bank, yet it does not alter anything in the mass of capital existing in a certain country, or even of money-capital. Capital stands here only for money-capital, and if it is not available in the actual form of money, it stands for a mere title on capital. This is a very important fact, since a scarcity of, and urgent demand for, *banking* capital is confounded with a decrease of *actual capital*, which is in such cases rather abundant in the form of means of production and products and swamps the markets.

It is, therefore, easy to explain, how it is that the mass of securities received by a bank as collateral increases, so that the growing demand for pecuniary accommodation can be satisfied by the bank, while the total mass of currency remains the same or decreases. This total mass is held in check during such periods of money stringency in two ways: 1) By a drain of gold; 2) by a demand for money in its capacity of a mere means of payment, when the issued bank notes return immediately, or when the transactions pass off without the intervention of notes by means of book credit; the payments are thus made wholly by a transaction of credit, and the settlement of these payments was the only purpose of this transaction. It is a peculiarity of money, when it serves merely to square balances of payments (and in times of crises loans are taken up for the purpose of paying, not of buying; for the purpose of winding up previous transactions, not of beginning new ones), that its circulation is but small, even where balances are not squared by mere operations of credit, without any intervention of money, so that, when there is a heavy demand for pecuniary accommodation, an enormous quantity of such transactions can take place without expanding the circulation. But the mere fact, that the circulation of the Bank of England remains stable or decreases simultaneously with a heavy satisfaction of money-accommodation on its part, does not prove without further ceremony, as Fullarton, Tooke and others assume (owing to their mistake to the effect that pecuniary accommodation is identical with taking up capital on loan as additional capital), that the circulation of money (of banknotes) in its function as a means of payment does not increase and extend. While the circulation of notes as means of purchase is decreasing in periods of business depression, when such a heavy accommodation is necessary, their circulation as means of payment may increase, and the aggregate amount of the circulation, the sum of the notes functioning as means of purchase and payment, may remain stable or may even decrease. The currency in its capacity as a means of payment, of banknotes im-

mediately returning to the bank issuing them, is not a currency in the eyes of those economists.

If the circulation as a means of payment were to increase at a higher rate than it decreases as a means of purchase, the aggregate currency would increase, although the money serving in the capacity of a means of purchase would have decreased considerably in quantity. And this actually happens in periods of crisis, when credit collapses completely, so that commodities and securities are unsalable and bills of exchange cannot be discounted, and nothing goes any more but cash money. Since Fullarton and others do not understand, that the circulation of notes as means of payment is the characteristic mark of such periods of money stringency, they treat this phenomenon as accidental. "With respect again to those examples of eager competition for the possession of banknotes, which characterise seasons of panic and which may sometimes, as at the close of 1825, lead to a sudden, though only temporary, enlargement of the issues, even while the efflux of bullion is still going, these, I apprehend, are not to be regarded as among the natural or necessary concomitants of a low exchange; the demand in such cases is not for circulation" (he should say circulation as a means of purchase) "but for hoarding, a demand on the part of alarmed bankers and capitalists which arises generally in the last act of the crisis" (that is, for a reserve of means of payment) "after a long continuation of the drain, and is the precursor of its termination." (Fullarton, p. 130.)

In the discussion of money as a means of payment (Volume I, chapter III, 3 b) we have already explained, in what manner, when the chain of payments is suddenly interrupted, money turns from its ideal form into a material and at the same time absolute form of value as compared to the commodities. This was illustrated by some examples (footnotes on pages 156 and 157). This interruption itself is partly an effect, partly a cause of the insecurity of credit and of the circumstances accompanying it, such as overcrowding of markets, depreciation of commodities, interruption of production, etc.

But it is evident, that Fullarton transforms the difference between money as a means of purchase and money as a means of payment into the mistaken conception of a difference between currency and capital. This is due to the narrow-minded banker's conception of circulation.

It might be asked, finally: What is it that is missing in such periods of stringency, capital or money in its function as a means of payment? And this is a well known controversy.

In the first place, so far as the stringency is marked by a drain of gold, it is evident that what is demanded is the international means of payment. But money in its character of international means of payment is gold in its metallic actuality, as a quantity of values in itself, as a mass of values. It is at the same time capital, capital not as commodity-capital, but as money-capital, capital not in the form of commodities but in the form of money (and at that of money in the eminent meaning of the term, in which it exists as a universal world market commodity). It is not a question of a contrast between a demand for money as a means of payment and a demand for capital. The contrast is rather between capital in its money-form and its commodity-form; and the form which is here demanded and which can alone perform any function here, is its money-form.

Aside from this demand for gold (or silver) it cannot be said that there is a dearth of capital in such periods of crisis. Under extraordinary circumstances, such as a corn famine or a cotton famine, etc., this may be the case; but these are not necessary or regular companions of such periods; and the existence of such a lack of capital cannot be assumed, without further ceremony, from the mere fact, that there is a heavy demand for pecuniary accommodation. On the contrary. The markets are overcrowded and swamped with commodities. Evidently it is not the lack of commodity-capital which causes the stringency. We shall return to this question later.

CHAPTER XXIX.

THE COMPOSITION OF BANKING CAPITAL.

It is now necessary to find out more accurately, what are the constituent elements of banking capital.

We have just seen, that Fullarton and others transform the distinction between money as a means of circulation and money as a means of payment (or eventually as world money, whenever it is a question of gold drains) into a distinction between currency and capital.

The peculiar role played by capital in this instance brought it about, that this banker's economics taught as insistently that money is indeed capital par excellence as the enlightened economics taught that money is not capital.

In subsequent analysis we shall demonstrate, that in such cases money-capital is confounded with moneyed capital in the sense of interest-bearing capital, while in the first named sense money-capital is but a transient form of capital as distinguished from the other forms of capital, commodity-capital and productive capital.

The banking capital consists 1) of cash money, gold or notes; 2) securities. These again may be divided into two parts: Commercial bills, bills of exchange, which run for some time, become due, and the cashing (discounting) of which is the essentially profitable business of the banker; and public securities, such as government bonds, treasury notes, stocks of all kinds, in brief, interest-bearing papers, which are essentially different from bills of exchange. Mortgages may also be classed with this part. The capital composed of these various constituents is again divided into the banker's business capital, and into the deposits, which form his banking capital, or borrowed capital. In the case of banks with an issue of notes these must be counted also. We leave the de-

posits and notes out of consideration for the present. It is evident, that nothing is altered in the actual constituents of banking capital (money, bills of exchange, deposits), whether these different elements represent the banker's own capital or deposits, the capital of other people. The same division would remain, whether he were to carry on his business with his own capital alone or with no other but deposited capital.

The form of the interest-bearing capital is responsible for the fact, that every determined and regular revenue of money appears as interest on some capital, whether it be due to some capital or not. The money revenue is first converted into interest, and with the interest comes also the capital, from which it is drawn. In like manner every sum of money appears as capital in connection with the interest-bearing capital, as long as it is not spent as revenue; that is, it appears as principal compared to the possible or actual interest which it may yield.

The matter is simple. Let the average rate of interest be 5% annually. A sum of 500 pounds sterling would then yield 25 pounds sterling, if converted into interest-bearing capital. Every fixed annual income of 25 pounds sterling may then be considered as interest on a capital of 500 pounds sterling. This, however, is and remains a purely illusory conception, except the case in which the source of the 25 pounds sterling, whether it be a mere title of ownership or claim of indebtedness, or an actual element of production, such as real estate, is directly transferable or assumes a form, in which it becomes transferable. Let us choose a government debt and wages for an illustration.

The state has to pay to his creditors annually a certain amount of interest for the money loaned from them. In this case the creditor cannot call on the state to give up the principal. He can merely sell his claim, his title of ownership. The capital itself has been consumed, spent by the state. It does not exist any longer. What the creditor of the state possesses is 1) a certificate of indebtedness from the state, amounting, say, to 100 pounds sterling; 2) this certificate gives to the creditor a claim upon the annual revenues of the

state, that is, the annual tax revenue, to a certain amount, say, 5 pounds, or 5 %; 3) the creditor may sell this certificate at his discretion to some other person. If the rate of interest is 5 %, and the security given by the state is good, the owner A of this certificate can sell it, as a rule, at its value of 100 pounds sterling to B; for it is the same to B, whether he loans 100 pounds sterling at 5 % annually, or whether he secures for himself by the payment of 100 pounds sterling an annual tribute from the state to the amount of 5 pounds sterling. But in all these cases the capital, the progeny of which (interest) is paid by the state, is illusory, fictitious capital. Not only does the amount loaned to the state exist no longer, but it was never intended at all to be invested as capital, and only by investment as capital could it have been transformed into a self-preserving value. For the original creditor A, the share of interest from taxes falling to him annually represents so much interest on his capital, just as a certain share of the spendthrift's fortune does for the usurer, although in either case the loaned amount was not invested as capital. The possibility of selling his claim on the revenues of the state represents for A the possible return of his principal. As for B, his capital, from his own private point of view, is invested as interest-bearing capital. So far as the transaction is concerned, B has simply taken the place of A by buying the latter's claim on the state's revenue. This transaction may be multiplied ever so often, the capital of the state debt remains a purely fictitious one, and from the moment that the certificates would become unsalable, the fiction of this capital would disappear. Nevertheless this fictitious capital has its own movements, as we shall see presently.

The capital of the national debt appears as a minus, and interest-bearing capital generally is the mother of all crazy forms, so that, for instance, debts may appear in the eyes of the banker as commodities. Now let us look at wages. Wages are here conceived as interest, so that labor-power stands for capital, which yields this interest. For instance, if the wages for one year amount to 50 pounds sterling, and the rate of interest is 5%, the annual labor-power is equal

to a capital of 1,000 pounds sterling. The insanity of the capitalist mode of conception reaches its climax here. For instead of explaining the self-expansion of capital out of the exploitation of labor-power, the matter is reversed and the productivity of labor-power itself is this mystic thing, interest-bearing capital. In the second half of the 17th century this used to be a favorite conception (for instance with Petty) but it is used even nowadays in good earnest by vulgar economists and more particularly by German statisticians.[93]

Unfortunately two disagreeable facts mar this conception. In the first place, the laborer must work, in order to secure this interest. In the second place, he cannot transform the capital-value of his labor-power into cash by transferring it. On the contrary, the annual value of his labor-power is equal to his average annual wages, and his labor has to make good to the seller of his labor-power this same value plus a surplus-value, the increment added by his labor. Under a slave system the laborer has a capital-value, namely his purchase price. And when he is rented out, the renter has to pay, in the first place, the interest on this purchase price, and must furthermore make good the annual wear and tear of the capital.

The forming of a fictitious capital is called capitalising. Every periodically repeated income is capitalised by calculating it on the average rate of interest, as an income which would be realised by a capital at this rate of interest. For instance, if the annual income is 100 pounds sterling and the rate of interest 5%, then these 100 pounds sterling would represent the annual interest on 2,000 pounds sterling, and these 2,000 pounds sterling are regarded as the capital-value of the legal title of ownership upon these 100 pounds sterling annually. For him who buys this title of ownership these 100 pounds sterling of annual income represent indeed the

[93] "The laborer has a value as capital, which is found by considering the money-value of his annual wages as income from interest . . . By capitalising the average daily wages at 4% we find the average value of an agricultural laborer of the male sex to be: German Austria, 1500 Thalers; Prussia, 1500; England, 3750; France, 2000; Interior Russia, 750 Thalers." Von Reden, *Vergleichende Kulturstatistik*. Berlin, 1848, p. 134.

interest on his capital at 5%. All connection with the actual process of self-expansion of capital is thus lost to the last vestige, and the conception of capital as something which expands itself automatically is thereby strengthened.

Even when the certificate of indebtedness — the security — does not represent a purely fictitious capital, as it does in the case of state debts, the capital-value of such papers is nevertheless wholly illusory. We have seen previously in what manner the credit system creates associated capital. The papers are considered as titles of owner-hip, which represent this capital. The stocks of railroads, mines, navigation companies, and the like, represent actual capital, namely the capital invested and used in such ventures, or the amount of money advanced by the stockholders for the purpose of being used as capital in such ventures. This does not exclude the possibility that they may become victims of swindle. But this capital does not exist twofold, it does not exist as the capital-value of titles of ownership on one side and as the actual capital invested, or to be invested, in those ventures on the other side. It exists only in this last form, and a share of stock is merely a title of ownership on a certain portion of the surplus-value to be realised by it. A may sell this title to B, and B may sell it to C. These transactions do not alter anything in the nature of the case. A or B then have their title in the shape of capital, but C has his capital merely in the shape of a title on the surplus-value to be realised by the stock capital.

The independent movement of the value of these titles of ownership, not only of government bonds but also of stocks, adds weight to the illusion that they constitute a real capital by the side of that capital, or that title, upon which they may have a claim. For they become commodities, whose price has its own peculiar movements and is fixed in its own way. Their market value is determined differently from their nominal value, without any change in the value of the actual capital, which expands, of course. On the one hand their market value fluctuates with the amount and security of the yields, on which they have a claim. If the nominal value of

a share of stock, that is, the invested sum originally represented by this share, is 100 pounds sterling, and the enterprise pays 10%, instead of 5%, then their market-value, other circumstances remaining the same, rises to 200 pounds sterling, so long as the rate of interest is 5%, for when capitalised at 5%, it now represents a fictitious capital of 200 pounds sterling. He who buys it for 200 pounds sterling receives a revenue of 5% on this investment of capital. If the success of the venture is such as to diminish the income from it, the reverse takes place. The market value of these papers is in part fictitious, as it is not determined merely by the actual income, but also by the expected income, which is calculated in advance. But assuming the self-expansion of the actual capital to proceed at a constant rate, or, where no capital exists, as in the case of state debts, the annual income to be fixed by law and otherwise sufficiently secured, the price of such securities rises and falls inversely as the rate of interest. If the rate of interest rises from 5% to 10%, then a security guaranteeing an income of 5 pounds sterling will represent only a capital of 50 pounds sterling. If the rate of interest falls from 5% to 2½%, then the same security will represent a capital of 200 pounds sterling. Its value is always but its capitalised income, that is, its income calculated on a fictitious capital of so many pounds sterling at the prevailing rate of interest. In times when there is a stringency of money on the market these securities will, therefore, fall in price for two reasons: First, because the rate of interest rises, and secondly, because they are thrown in large quantities upon the market for the purpose of getting ready cash. This drop in their price takes place independently of the fact, whether the income guaranteed to their owner by these papers is constant, as it is in the case of government bonds, or whether the self-expansion of the actual capital, which they represent, for instance in industrial enterprises, is subject to interruptions such as interfere with the process of reproduction. In this last eventuality the two causes of depreciation mentioned above are joined by a third one. As soon as the storm is over, the papers rise once more to their

former level, unless they represent failures or swindles. Their depreciation in times of crisis serves as a potent means of centralising money.[94]

To the extent that the depreciation or appreciation of such papers is independent of the movements of the value of actual capital represented by them, the wealth of the nation is just as great before as after their depreciation. "On October 23, 1847, the public funds and the canal and railroad stocks were already depreciated by 114,752,225 pounds sterling." So said Morris, the Governor of the Bank of England, in his testimony before the Committee on Commercial Distress, 1847–48. Unless this depreciation implied an actual stopping of production and of traffic on canals and rails, or a suspension of pending enterprises in the beginning stages, or a throwing away of capital in positively worthless ventures, the nation did not grow poorer by one cent through the bursting of this bubble of fictitious capital.

In all countries of capitalist production, there exists an enormous quantity of so-called interest-bearing capital, or moneyed capital, in this form. And accumulation of money-capital signifies to a large extent nothing else but an accumulation of such claims on production, an accumulation of the market-price, the illusory capital-value, of these claims.

A part of the banking capital is invested in these so-called interest-bearing papers. This is itself a portion of the reserve capital, which does not perform any function in the actual business of banking. The greater portion of these papers consists of bills of exchange, that is, promises to pay made by industrial capitalists or merchants. For the money lender these papers are interest-bearing, in other words, when he buys them, he deducts interest for the time which they still have to run. This is called discounting. It depends on the

[94] [Immediately after the February Revolution, when commodities and securities were extremely depreciated and utterly unsaleable, a Swiss merchant in Liverpool, Mr. R. Zwilchenbart — who told my father about it — cashed all his belongings traveled with his cash to Paris and went to Rothschild, offering to do a joint business with him. Rothschild looked at him fixedly, rushed towards him, caught both his shoulders in his hands and asked: "Have you money in your possession?" "Yes, Baron." "Then you are my man." And both of them made a great haul.— F. E.]

prevailing rate of interest, how much of a deduction is made from the sum for which the bill calls.

The last part of the capital of a banker consists of his money reserve in gold and notes. The deposits, unless tied up by agreement for a certain time, are always at the disposal of the depositors. They are in a state of continual fluctuation. But while one depositor withdraws his, another brings his in, so that the general average amount of deposits fluctuates little during periods of normal business.

The reserve funds of the banks, in countries with capitalist production, always express on an average the magnitude of the money existing in the shape of a hoard, and a portion of this hoard in its turn consists of papers, mere drafts upon gold, which have no value in themselves. The greater portion of the banking capital is, therefore, purely fictitious and consists of certificates of indebtedness (bills of exchange), government securities (which represent spent capital), and stocks (claims on future yields of production). And it should not be forgotten, that the money-value of capital represented by these papers in the strongboxes of the banker is itself fictitious, even of those which are checks for guaranteed incomes, such as public bonds, or titles on actual capital, like industrial stocks, and that this value is regulated differently than that of the actual capital, which they represent at least in part; or, when they stand for mere claims on the output of production, and not for capital, that the claim on the same amount is expressed in a continually changing fictitious money-capital. In addition to this it must be noted, that this fictitious capital represents largely, not his own capital, but that of the public, which makes deposits with him, either with or without interest.

Deposits are always made in money, in gold or notes, or in checks upon these. With the exception of the reserve fund, which is contracted or expanded in proportion to the requirements of actual circulation, these deposits are in fact always in the hands, on one side, of the industrial capitalists and merchants, whose bills of exchange are discounted with them, and who receive advances out of them; on the other side, they

are in the hands of dealers in securities (exchange brokers), or in the hands of private parties, who have sold their securities, or in the hands of the government (in the case of treasury notes and new loans). The deposits themselves play a double role. On the one hand, as we have just mentioned, they are loaned out as interest-bearing capital and are not found in the cash boxes of the banks, but figure merely in their books as credits of the depositors. On the other hand they figure as such book entries to the extent that the mutual credits of the depositors in the shape of checks on their deposits are balanced against one another and so recorded. In this procedure it is immaterial, whether these deposits are entrusted to the same banker, who can thus balance the various credits against each other, or whether this is done in different banks, who mutually exchange checks and pay only the balances to one another.

With the development of the credit system and of interest-bearing capital all capital seems to double, or even treble, itself by the various modes, in which the same capital, or perhaps the same claim on a debt, appears in different forms in different hands.[95]

The greater portion of this "money-capital" is purely fictitious. All the deposits, with the exception of the reserve fund, are merely credits placed with the banker, which, how-

[95] [This duplication and triplication of capital has developed considerably further in recent years, for instance through financial trusts, which already occupy a column of their own in the London bank reports. A society is organised for the purchase of a certain class of interest-bearing papers, say, of foreign government bonds, English municipal or American public bonds, railroad stocks, etc. The capital, for instance, 2 million pounds sterling, is secured by stock subscriptions. The Board of Directors buys the desired values up, or speculates more or less actively in them, and distributes the annual amounts of interest as dividends among the stockholders, after deducting the expenses. Furthermore, some stock companies have adopted the custom of dividing the ordinary shares into two classes, preferred and deferred. The preferred receive a fixed rate of interest, say 5%, provided that the total profit permits it; if there is anything left after that, the deferred get it. In this way the "solid" investment of capital is more or less separated by preferred shares from the speculation with the deferred shares. Since a few large enterprises have been unwilling to adopt this new mode, the expedient has been resorted to of organising new companies, that invest one or several millions of pounds sterling in shares of the first company and then issue new shares to the amount of the nominal value of the first shares, but make half of them preferred and the other half deferred. In this case the original shares are doubled, by serving as a basis for a new issue of shares.— F. E.]

ever, never exist in deposit. To the extent that they serve in the Giro business, they perform the function of capital for the bankers, after these have loaned them out. They pay to one another their mutual checks upon the nonexisting deposits by balancing their mutual accounts.

Adam Smith says justly with regard to the role played by capital in the loaning of money: "Even in the money business the money is merely a check transferring from one hand to another such capitals as are not used by their owners. These capitals may be almost to any amount larger than the amount of money, which serves as an instrument of their transfer. The same pieces of money serve successively in many different loans, likewise in many different purchases. For instance, A lends to W 1,000 pounds sterling, with which W immediately buys from B 1,000 pounds sterling worth of commodities. Since B himself has no immediate use for this money, he lends the identical pieces of money to X, who immediately buys from C commodities worth 1,000 pounds sterling. In the same way and for the same reason C lends this money to Y, who again buys with it commodities from D. In this way the same pieces of gold or paper may serve in the course of a few days in the promotion of three different loans and three different purchases, each one of which has a value equal to the full amount of these pieces. What the three moneyed men, A, B and C have transferred to the three borrowers, W, X and Y, is the power to make these purchases. In this power consists both the value and the usefulness of these loans. The capital loaned out by these three moneyed men is equal to the value of the commodities that can be bought with it, and it is three times greater than the value of the money with which these purchases are made. Nevertheless all these loans may be perfectly safe, since the commodities bought with them by the different debtors are employed in such a way, that they will in time bring an equal value in gold or paper money with a profit to boot. And just as the same pieces of money may serve in the promotion of different loans to an amount exceeding their own value three times, or

even thirty times, just so may they serve successively as means of return payment." (Book II, chapter IV.)

Since the same piece of money may perform different purchases, according to the velocity of its circulation, it may just as well perform the service of different loans, for the purchases take it from one hand to another, and a loan is but a transfer from one hand to another without the intervention of a purchase. To every seller his money represents the changed form of his commodities. Nowadays, when every value is expressed as the value of capital, it represents in the various loans different capitals, and this is but another way of saying that it can realise different commodity-values successively. At the same time it serves as a medium of circulation, in order to transfer the material capitals from hand to hand. In the transaction of loaning it does not pass from hand to hand as a medium of circulation. So long as it remains in the hands of the lender, it is in his hands not a medium of circulation, but the existing value of his capital. And in this form he transfers it when loaning it to another. If A had loaned the money to B, and B to C, without the intervention of purchases, then the same money would not represent three capitals, but only one, only one capital-value. How many capitals it actually represents depends on the number of times in which it performs the service of the embodied value of different commodity-capitals.

The same thing which Adam Smith says of loans in general applies also to deposits, since these are merely another name for loans, which the public gives to the bankers. The same pieces of money may serve as instruments for any number of deposits.

"It is undoubtedly true, that the 1,000 pounds sterling, which some one deposits today with A, are again issued tomorrow and become a deposit with B. The day after, paid away by B, they may form a deposit with C, and so forth infinitely. The same 1,000 pounds sterling may, therefore, by a number of transfers, multiply themselves into an absolutely indeterminable sum of deposits. It is, therefore, possible, that nine-tenths of all the deposits in the United King-

dom have no existence, save for the entries in the books of bankers registering them, who have to square accounts in due time. . . . Such was the case in Scotland, where the currency of money never exceeded 3 million pounds sterling, while the deposits amounted to 27 millions. Unless a general run be made on the banks on account of these deposits, the same 1,000 pounds sterling, traveling backwards, might easily balance an equally indeterminable sum. Since the same 1,000 pounds sterling, with which some one pays today his debt to some dealer, may tomorrow settle this dealer's debt to some merchant, and next day the debt of the merchant to his bank, and so forth without end, the same 1,000 pounds sterling may also wander from hand to hand and from bank to bank, and balance any conceivable amount of deposits." (*The Currency Question Reviewed,* pp. 162, 163.)

Just as everything is duplicated and triplicated in this credit system and commuted into a mere fiction, so the same applies to the "reserve fund," where one would at last hope to grasp something solid.

Listen once more to Mr. Morris, the Governor of the Bank of England: "The reserves of the private banks are in the hands of the Bank of England in the form of deposits. The first effects of an export of gold seem to strike only the Bank of England; but it would just as well influence the reserves of the other banks, since it means an export of a part of the reserves, which they have deposited in our bank. In the same way it would influence the reserves of all provincial banks." (*Commercial Distress* 1847–48.) Ultimately, then, the reserve funds actually dissolve themselves into the reserve fund of the Bank of England.[96]

[96] [To what extent this has since increased is proved by the following official tabulation of the bank reserves of the fifteen largest London banks in November, 1892, taken from the *Daily News* of December 15, 1892:

NAME OF BANK	LIABILITIES	CASH RESERVE	PERCENTAGES
City	£ 9,317,629	£ 746,551	8.01
Capital and Counties	11,392,744	1,307,483	11.47
Imperial	3,987,400	447,157	11.21
Lloyds	23,800,937	2,966,806	12.46
London & Westminster	24,671,559	3,818,885	15.50
London & S. Western	5,570,268	812,353	13.58
London Joint Stock	12,127,993	1,288,977	10.62

However, this reserve fund again has a double existence. The reserve fund of the banking department of the Bank of England is equal to the excess of the notes, which the Bank is authorised to issue, over the notes in circulation. The legal maximum of the note issue is 14 million pounds sterling (for which no metallic reserve is required; it is the approximate amount owed by the state to the Bank) plus the amount of the precious metals in the Bank. If the supply of precious metals in the Bank amounts to 14 million pounds sterling, the Bank can issue 28 millions in notes, and if 20 millions of these are in circulation, the reserve fund of the banking department is 8 million pounds sterling. These 8 million pounds sterling are, in that case, legally the banking capital at the disposal of the Bank, and at the same time the reserve fund for its deposits. If an exportation of gold takes place now, by which the supply of precious metals in the Bank is reduced by 6 millions — notes to this amount must be destroyed at the same time — then the reserve of the banking department would fall from 8 millions to 2 millions. On the one hand, the Bank would raise its rate of interest considerably; on the other hand, the banks having deposits with it, and the other depositors, would observe a large decrease of the reserve fund covering their own credits in the Bank. In 1857 four of the largest stock banks of London threatened to call in their deposits, and thereby bankrupt the banking department, unless the Bank of England would secure a

NAME OF BANK	LIABILITIES	CASH RESERVE	PERCENTAGES
London & Midland	8,814,499	1,127,280	12.79
London & County	37,111,035	3,600,374	9.70
National	11,163,829	1,426,225	12.77
National Provincial	41,907,384	4,614,780	11.01
Parrs & the Alliance	12,794,489	1,532,707	11.93
Prescott & Co.	4,041,058	538,517	13.07
Union of London	15,502,618	2,300,084	14.84
Williams, Deacon & Manchester, etc.	10,452,381	1,317,628	12.60
Total	£232,655,823	£27,845,807	11.97

Of this sum of almost 28 millions of reserve, at least 25 millions are deposited in the Bank of England, and at most 3 millions of cash in the strongboxes of the 15 banks themselves. But the cash reserve of the banking department of the Bank of England never exceeded 16 millions during that same November of 1892.— F. E.]

"government script" suspending the Bank Acts of 1844.[97]

In this way the banking department might fail, while a certain number of millions (for instance, 8 millions in 1847) are held in its issue department to secure the convertibility of its circulating notes. But this security is once more illusory.

"The greater portion of the deposits, for which the bankers themselves have no immediate demand, passes into the hands of the bill brokers, who in return give to the banker security for his loan by means of commercial bills, which they have already discounted for people in London or in the provinces. The bill broker is responsible to the banker for the return payment of this money at call; and these transactions are of such an enormous volume, that Mr. Neave, the present Governor of the Bank of England, said in his testimony: We know that one broker had 5 millions, and we have reason to assume, that another had between 8 and 10 millions; another had 4, another 3½, a third more than 8. I speak of deposits with the brokers." (*Report of Committee on Bank Acts,* 1857–58, p. 5, section 8.)

"The London bill brokers . . . carried on their enormous business without any reserve in cash; they relied upon the incomes from the successively due bills, or when it came to the worst, upon their power to secure from the Bank of England loans on depositing bills discounted by them."—Two firms of bill brokers in London suspended payments in 1847; both resumed business later. In 1857 they suspended again. The liabilities of one of these firms amounted in 1847 in round figures to 2,683,000 pounds sterling with a capital of 180,000 pounds sterling; its liabilities in 1857 were 5,300,000 pounds sterling, while its capital apparently was not more than one-quarter of what it had been in 1847. The liabilities of the other firm were both times between 3 or 4 millions, while its capital amounted to no more than 45,000 pounds sterling. (*Ibidem,* p. XXI, section 52.)

[97] The suspension of the Bank Acts of 1844 permitted to the Bank to issue any quantity of bank notes regardless of any backing by the gold reserve in its possession; to create, in this way, an arbitrary quantity of fictitious money-capital made of paper, and use it for the purpose of making loans to banks, exchange brokers, and through them to commerce.

CHAPTER XXX.

MONEY-CAPITAL AND ACTUAL CAPITAL, I.

The only difficult questions, which we are now approaching in the matter of the credit system, are the following:

First: The accumulation of the money-capital strictly so-called. To what extent is it, and is it not, an indication of an actual accumulation of capital, that is, of reproduction on an enlarged scale? The so-called plethora of capital, an expression used only with reference to the interest-bearing capital, is it only a peculiar way of expressing industrial overproduction, or does it constitute a separate phenomenon alongside of it? Does this plethora, or this excessive supply of money-capital, coincide with the existence of stagnating masses of money (bullion, gold coin and bank notes), so that this superfluity of actual money is an expression and phenomenon of that plethora of loan capital?

Secondly: To what extent does a stringency of money, that is, a scarcity of loan capital, express a real lack of actual capital (commodity-capital and productive capital)? To what extent does it coincide, on the other hand, with a lack of money as such, a lack of currency?

So far as we have hitherto considered the peculiar form of accumulation of money-capital and of money wealth in general, it resolved itself into an accumulation of claims of ownership upon labor. The accumulation of the capital of the national debt has been revealed to mean merely an increase of a class of state creditors, who have the privilege of a first claim upon the revenues.[98]

[98] The public funds are nothing else but an imaginary capital, which represents that portion of the annual revenue, which is set aside to pay the debt. A capital of the same amount has been spent; it is this which serves as a denominator for the loan, but it is not this which is represented by the public funds; for this capital does not exist any longer. However, new wealth must be created by the work of industry; a portion of this wealth is annually set aside in advance for those, who

In these facts, by which even an accumulation of debts may appear as an accumulation of capital, the perfection of the reversal accomplished by the credit system becomes apparent. These certificates of indebtedness, which are issued in place of the originally loaned and long spent capital, these paper duplicates of destroyed capital, serve for their owners as capital to the extent that they are salable commodities and may, therefore, be reconverted into capital.

The titles of ownership upon company business, railroads, mines, etc., are indeed, as we have seen, titles on actual capital. But they do not imply any control of this capital. It cannot be called in. They merely convey legal titles to a portion of the surplus-value to be produced by it. But these titles become likewise paper duplicates of the actual capital, as though a bill of lading were to acquire a value separate from the cargo and simultaneously with it. They become nominal representatives of a capital that does not exist. For the actual capital exists simultaneously and does not change hands by the transfer of those duplicates. They assume the form of interest-bearing capital, because they not only safeguard a certain income, but also make it possible to secure possession of their capital-value in the shape of a return-payment when sold. To the extent that the accumulation of these papers expresses the accumulation of railroads, mines, steamships, etc., it indicates the expansion of the actual process of reproduction, just as the expansion, say, of a tax list indicates the expansion of the taxed objects, for instance, of movable property. But as duplicates serving themselves as commodities for sale and thus circulating as capital-values they are illusory, and their value may fall or rise independently of the value of the actual capital, upon which they represent a claim. Their value, that is, their quotation at the Stock Exchange, necessarily has a tendency to rise with a fall in the rate of interest, so far as this fall, independently

have loaned that wealth, which has been spent; this portion is taken by means of taxes from those who produce it, and is given to the creditors of the state, and, according to the customary proportion between capital and interest in this country, an imaginary capital is assumed of the same magnitude as that which could give rise to the annual income which these creditors are to receive. *Sismondi, Nouveaux Principles,* II, p. 230.

of the peculiar movements of money-capital, is due merely to the tendency of the rate of profit to fall; so that this imaginary wealth, which has originally a nominal value for each of its aliquot parts, expands for this reason alone in the course of capitalist production.[99]

Gain and loss through fluctuations in the price of these titles of ownership, and their centralisation in the hands of railroad kings, etc., naturally becomes more and more a matter of gambling, which takes the place of labor as the original method of acquiring capital and also assumes the place of direct force. This sort of imaginary money wealth does not merely constitute a very considerable part of the money wealth of private people, but also of banking capital, as we have already indicated.

In order to settle this point without delay, we mention the idea, that one might also mean by the accumulation of money-capital the accumulation of wealth in the hands of bankers (money lenders by profession), acting as middle men between private money-capitalists on one side and the state, communities, and reproducing borrowers on the other. For the entire vast extension of the credit system, and of all credit in general, is exploited by them as though it were their private capital. These fellows possess capital and incomes always in the form of money or of direct claims upon money. The accumulation of the wealth of this class may proceed in a direction very different from actual accumulation, but it proves at any rate, that this class pockets a good deal of the real accumulation.

Let us reduce the inquiry to narrower limits. Government bonds, like stocks and other securities of all kinds, are spheres of investment for loanable capital, for capital intended to bear interest. They are forms of loaning such capital. But they

[99] A portion of the accumulated loanable money-capital is indeed merely an expression of the industrial capital. For instance, when England, in 1857, had invested 80 million pounds sterling in American railroads and other enterprises, this investment was transacted almost throughout by the export of English commodities for which the Americans did not have to make payment in return. The English exporter drew bills of exchange for these commodities on America, the English stock subscribers bought these bills and used them to pay the amount of their stock subscriptions to America.

are not the loan capital itself, which is invested in them. On the other hand, so far as credit plays a direct role in the process of reproduction: what the industrial capitalist or the merchant need when wishing to have a bill discounted or a loan granted is neither stocks nor government bonds. What they need is money. They pawn or sell those securities, when they cannot secure money in any other way. It is the accumulation of this loan capital, with which we have to deal here, and more particularly of the loanable money-capital. We are not here concerned in the loans of houses, machines, or other fixed capital. Nor are we concerned in loans, which industrials and merchants make to one another in the shape of commodities and within the circle of the process of reproduction. We must, indeed, investigate this point still farther before we proceed. But we are concerned exclusively in loans of money, which are made by bankers, as middle men, to industrials and merchants.

Let us, then, analyse first the commercial credit, that is, the credit which the capitalists engaged in reproduction give to one another. It forms the basis of the credit system. Its representative is the bill of exchange, a certificate of indebtedness whose payment is due at a certain date, a document of deferred payment. Every one gives credit with one hand and takes it with the other. Let us leave aside, for the present, the banking credit, which constitutes another, quite different, element. To the extent that these bills in their turn circulate among the merchants as means of payment, by endorsement from one to another, without the intervention of discount, it is merely a transfer of a claim of indebtedness from A to B, and does not alter anything in the general connection. It merely places one man into the position of another. And even in this case the liquidation may take place without the intervention of money. The spinner A, for instance, has to pay a bill of exchange to the cotton broker B, and he has to pay a bill to the importer C. Now, if C also exports yarn, which happens often enough, he may buy yarn from A on a

bill of exchange, and the spinner A may guarantee the broker B with the broker's own bill paid by C to A, whereby at best a balance may have to be settled. The entire transaction then promotes merely the exchange of cotton and yarn. The exporter represents but the spinner, the cotton broker the cotton planter.

In the cycle of this commercial credit we must note two things:

First: The settlement of these mutual claims of indebtedness depends upon the reflux of capital, that is, of C — M, which is merely deferred. If the spinner has received a bill of exchange from a cotton goods manufacturer, then this manufacturer can pay, when he has sold the cotton goods, which he has on the market. If the corn speculator has made out a bill of exchange on his dealer, then the dealer can pay the money, if the corn has meanwhile been sold at the expected price. These payments, then, depend upon the smooth run of the reproduction, that is, the process of production and consumption. But since the credits are mutual, the solvency of one depends upon the solvency of another; for in making out his bill of exchange every one may have counted either on the reflux of the capital in his own business or on the reflux of the capital in anothers business, who has to pay him for a bill of exchange drawn in the meantime. Aside from the prospect of returns, the payment is possible only by means of reserve capital, which the writer of the bill has at his command, in order to meet his obligations in case the returns should be delayed.

Secondly: This credit system does not do away with the necessity of cash payments. For a large portion of the expenses must always be paid in cash, such as wages, taxes, etc. Furthermore, capitalist B, who has received from C a bill of exchange in place of cash payment, may have to pay his own due bill to D before the bill of C becomes due, and so he must have ready cash. A rotation of such completeness as that assumed above in the reproduction from cotton planter to cotton spinner and vice versa will be an exception; as a rule reproduction will be infringed at many points. We have seen in

the discussion of the process of reproduction, volume II, Part III, that the producers of constant capital exchange partly constant capital among each other. In such a case the bills of exchange may be balanced against one another more or less. The same may be the case in the ascending line of production, where the cotton broker draws on the cotton spinner, the spinner on the manufacturer of cotton goods, the manufacturer on the exporter, the exporter on the importer (who may be an importer of cotton). But the cycle of these transactions is not completed simultaneously, and the series of claims is not turned around backward in the same way. For instance, the claim of the spinner on the weaver is not settled by the claim of the coal dealer on the machine builder. The spinner never has any counterclaims in his business on the machine manufacturer, because his product, yarn, never enters as an element into the process of reproduction of the machine maker. Such claims must, therefore, be settled by money.

The limits of this commercial credit, considered by itself, are 1), the wealth of the industrials and merchants, that is, their command of reserve capital in case of delayed returns; 2) these returns themselves. These may be delayed in time or the prices of commodities may fall in the meantime or the commodities may become momentarily unsalable through a clogging of the markets. The longer the bill runs, the larger must be the reserve capital, and the greater is the possibility of an infringement or a retardation of the returns through a fall of prices or an overstocking of markets. And, furthermore, the returns are so much less secure, the more the original transaction was conditioned upon speculation on the rise or fall of the prices of commodities. But it is evident, that with the development of the productive power of labor, and thus of production on a large scale, 1) the markets expand and move a greater distance from the place of production; 2) that credits must be prolonged in consequence; 3) that the speculative element must thus more and more dominate the transactions. Production on a large scale and for distant markets throws the total product into the

hands of commerce; but it is impossible, that the capital of a nation should be doubled in such a way, that commerce by itself would be able to buy up the entire national product with its own capital and to sell it again. Credit is, therefore, indispensable here. Credit must grow in volume with the growing volume of value in production, and it must grow in the matter of time with the increasing distance of the markets. A mutual interaction takes place here. The development of the process of production extends the credit, and credit leads to an extension of industrial and commercial operations.

Looking upon this credit separate from banking credit, it is evident that it grows with an increasing volume of industrial capital itself. Loan capital and industrial capital are here identical. The loaned capitals are commodity-capitals, intended either for ultimate individual consumption, or for the replacement of the constant elements of productive capital. What appears as loan capital in this case is always capital existing in some definite phase of the process of reproduction, but passing through sale and purchase from one hand to the other, while its equivalent is not paid to the buyer until later at some stipulated time. For instance, the cotton passes into the hands of the spinner in exchange for a bill of exchange, the yarn into the hands of the manufacturer of cotton goods in exchange for another bill, the cotton goods into the hands of the merchant for another bill, from the hands of the merchant into those of the exporter for another bill, from the hands of the exporter for another bill into those of some merchant in India, who sells the goods and buys indigo instead, etc. During this passage from hand to hand the cotton accomplishes its metamorphosis into cotton goods, and the cotton goods are finally transported to India and exchanged for indigo, which is shipped to Europe and enters there into the reproductive process. The various phases of the process of reproduction are here promoted by the credit, without any payment on the part of the spinner for the cotton, on the part of the manufacturer of cotton goods for the yarn, on the part of the merchant for the cotton goods, etc. In the first acts of this process the commodity, cotton, goes

through its different phases of production, and this transition is promoted by credit. But as soon as the cotton has received its ultimate form as a commodity, the same commodity-capital passes on through the hands of different merchants, who promote its transportation to distant markets, and the last of the merchants finally sells these commodities to the consumer and buys other commodities in their stead, which passes either into consumption or into the process of reproduction. Here, then, we have to distinguish two sections: In the first, credit promotes the actual successive phases in the production of the same article; in the second, it promotes merely the passage of the finished article from the hands of one merchant into those of another, including its transportation, in other words, the act C — M. Yet the commodity is even here at least in a process of circulation, that is, in a phase of the process of reproduction.

It follows, then, that it is never unemployed capital, which is loaned here, but capital, which must change its form in the hands of its owner and which exists in such a form, that it is merely commodity-capital for him, that is, capital which must be reconverted into its original form, and for the present, at least, into money. It is, therefore, the metamorphosis of the commodity, which is here promoted by credit; not merely C — M, but also M — C and the actual process of reproduction. Much credit within the reproductive cycle does not signify (banker's credit excepted) much unemployed capital, which is offered for loans and looking for profitable investment. It means rather much employment for capital in the process of reproduction. Credit promotes here, 1) so far as the industrial capitalists are concerned, the transition of industrial capital from one phase into another, the connection of the related and dove-tailing spheres of production; 2) so far as the merchants are concerned, it promotes the transportation and the passage of commodities from one hand to another until their definite sale for money or their exchange for other commodities.

The maximum of credit is here identical with the fullest employment of industrial capital, that is, the utmost exertion

of its reproductive power without regard to the limits of consumption. These limits of consumption are extended by the exertions of the process of reproduction itself. On one hand this increases the consumption of revenue on the part of laborers and capitalists, on the other it is identical with an exertion of productive consumption.

So long as the process of reproduction is in flow and the reflux assured, this credit lasts and extends, and its extension is based upon the extension of the process of reproduction itself. As soon as a stoppage takes place, in consequence of delayed returns, overstocked markets, fallen prices, there is a superfluity of industrial capital, but it is in a form, in which it cannot perform its functions. It is a mass of commodity-capital, but it is unsalable. It is a mass of fixed capital, but largely unemployed through the clogging of reproduction. Credit is contracted, 1) because this capital is unemployed, that is, stops in one of its phases of reproduction, not being able to complete its metamorphosis; 2) because confidence in the continuity of the process of reproduction has been shaken; 3) because the demand for this commercial credit decreases. The spinner, who restricts his production and has a mass of unsold yarn in stock, does not need to buy any cotton on credit; the merchant does not need to buy any commodities on credit, because he has more than enough of them.

Hence, if this expansion is disturbed, or even the normal exertion of the process of reproduction infringed, credit also becomes scarce; it is more difficult to get commodities on credit. It is particularly the demand for cash payment and the caution observed toward sales on credit which are characteristic of that phase of the industrial cycle, which follows a crash. In the crisis itself, when every one has things to sell, cannot sell them, and yet must sell them, if he would secure means of payment, it is not the mass of the unemployed and investment seeking capital, but rather the mass of capital tied up in his process of reproduction, that is greatest just when the lack of credit is most felt (and the rate of discount highest in banking credit). The hitherto

invested capital is then, indeed, unemployed, because the process of reproduction lags. Factories are closed, raw materials accumulate, finished products swamp the market as commodities. Nothing is more erroneous, therefore, than to blame a scarcity of productive capital for such a condition. It is precisely at such times that there is a superabundance of productive capital, partly so far as the normal, but temporarily contracted, scale of reproduction is concerned, partly with regard to the paralysed consumption.

Let us suppose that the whole society is composed only of industrial capitalists and wage workers. Let us furthermore make exceptions of fluctuations of prices, which prevent large portions of the total capital from reproducing themselves under average conditions and which, owing to the general interrelations of the entire process of reproduction, such as are developed particularly by credit, must always call forth general stoppages of a transient nature. Let us also make abstraction of the bogus transactions and speculations, which the credit system favors. In that case, a crisis could be explained only by a disproportion of production in various branches, and by a disproportion of the consumption of the capitalists and the accumulation of their capitals. But as matters stand, the reproduction of the capitals invested in production depends largely upon the consuming power of the non-producing classes; while the consuming power of the laborers is handicapped partly by the laws of wages, partly by the fact that it can be exerted only so long as the laborers can be employed at a profit for the capitalist class. The last cause of all real crises always remains the poverty and restricted consumption of the masses as compared to the tendency of capitalist production to develop the productive forces in such a way, that only the absolute power of consumption of the entire society would be their limit.

A real lack of productive capital, at least among capitalistically developed nations, can be said to exist only in times of general crop failures, either in the principal means of subsistence, or in the principal raw materials of industry.

However, in addition to this commercial credit we have the

money credit strictly so-called. The loans of the industrials and merchants among one another go hand in hand with loans made to them by the banker and money lender in the form of money. In the discounting of bills of exchange the loan is but nominal. A manufacturer sells his product for a bill of exchange and gets this bill discounted at some bill broker's. In reality this broker loans only the credit of his banker, and this banker loans to the broker the money of his depositors, made up of the industrial capitalists and merchants themselves, of drawers of ground rent and other unproductive classes, but also of laborers (in savings banks). In this way every industrial manufacturer and merchant gets around the necessity of keeping a large reserve fund and being dependent upon his actual returns. On the other hand the whole process becomes so complicated, partly by the making of bogus checks, partly by operations with commodities for the mere purpose of writing bills of exchange, that the semblance of a solid business and a smooth run of returns may persist even after returns come in only at the expense of swindled money lenders or swindled producers. Thus the business appears almost too sound just on the eve of a crash. The best proof of this is furnished, for instance, by the Reports on Bank Acts of 1857 and 1858, in which all bank directors, merchants, in short, all the summoned experts, with Lord Overstone at their head, congratulated one another on the prosperity and soundness of business — just one month before the eruption of the crisis of August, 1857. And, queer enough, Tooke in his *History of Prices* passes through the same illusion as the historian of every crisis. Business is always thoroughly sound and the campaign in full swing, until the collapse suddenly overtakes them.

We revert now to the accumulation of money-capital.

Not every augmentation of loanable capital indicates a real accumulation of capital or expansion of the process of reproduction. This becomes most evident in the phase of the industrial cycle following immediately after a crisis, when

loanable capital lies fallow in masses. In such moments, in which the process of production is restricted (production in the English industrial districts was reduced by one-third after the crisis of 1847), prices of commodities at their lowest level, the spirit of enterprise paralysed, the rate of interest is low, and it indicates then merely an increase of loanable capital precisely because the industrial capital has been laid lame. It is quite obvious, that less currency is required, when the prices of commodities have fallen, the number of transactions decreased, and the capital invested in wages contracted; that, on the other hand, no additional money is required for the function of world money after the debts to foreign countries have been settled either by the exportation of gold or by bankruptcies; that, finally, the volume of the business of discounting bills diminishes with the number and amounts of bills of exchange. Hence the demand for loanable capital, either in the form of means of circulation or of means of payment (the investment of new capital being out of the question for a while), decreases and it becomes relatively abundant. At the same time, the supply of loanable capital increases also positively under such circumstances, as we shall see later.

Thus "a reduction of transactions and a great superabundance of money" prevailed after the crisis of 1847 (*Commercial Distress*, 1847-48, Evidence No. 1664.) The rate of interest was very low on account of the "almost complete annihilation of commerce and nearly utter absence of a possibility of investing money" (l. c., p. 45, Testimony of Hodgson, Director of the Royal Bank of Liverpool). What nonsense those gentlemen concocted (and Hodgson is one of the best of them) in order to explain these facts, may be seen from the following phrase: "The stringency (1847) arose from an actual reduction of the money-capital in the country, caused partly by the necessity of paying for the imports from all quarters of the globe in gold, and partly by the conversion of floating capital into fixed." How the conversion of circulating capital into fixed capital should reduce the money-capital of a country is unintelligible. For in the

case of railroads, e. g., in which capital was mainly invested at that time, neither gold nor paper are used up for viaducts and rails, and the money for the railroad stocks, to the extent that it had been deposited for subscriptions, performed exactly the same functions as any other money deposited in banks and even increased the loanable money-capital temporarily, as shown above. But to the extent that it had been spent for construction, it circulated in the country as a means of circulation and payment. Only so far as fixed capital cannot be exported, so that with the impossibility of its export the available capital secured by returns from exported articles is eliminated, including the returns in bullion or cash, might the money-capital be affected. But English export articles were likewise piled up in masses on the foreign markets without being salable. It is true, the floating capital of the merchants and manufacturers of Manchester, etc., who had tied up a portion of their normal business capital in railroad stocks and were therefore dependent upon loan capital for the continuation of their business, had become fixed, and they had to put up with the consequences. But it would have been the same, if the capital belonging to their business, but withdrawn from it, had been invested, say, in mines instead of railroads, mining products like iron, coal, copper being themselves floating capital.

The actual reduction of available money-capital through crop failure, corn imports, and gold exports constituted an event that had nothing to do with the railroad swindles.— "Nearly all commercial firms had begun to starve their business more or less, in order to invest the money in railroads." — The very extensive loans, which were made to railroads by commercial firms, misled the latter to depend far too much through the discounting of bills upon the banks and to carry on the commercial business in this way" (the same Hodgson, l. c., p. 67). "In Manchester immense losses were sustained through speculation in railroads" (R. Gardner, previously mentioned in volume I chapter XV, 3, c, p. 449, American edition, and in other places, Evidence No. 4877, l. c.).

One of the principal causes of the crisis of 1847 was the colossal overcrowding of the markets and the unbounded swindle in the East Indian trade with commodities. But there were also other circumstances, which bankrupted very rich firms in this line: "They had plenty of means, but these could not be made available. Their entire capital was tied up in real estate in Mauritius, or in indigo and sugar factories. After they had assumed obligations to the tune of 5–600,000 pounds sterling, they had no means at hand to pay their bills of exchange, and finally it was found that, in order to pay their bills, they would have to rely entirely upon credit" (Ch. Turner, great East Indian merchant in Liverpool, No. 730, l. c.). — See furthermore Gardner, No. 4872, l. c.: Immediately after the Chinese treaty such great prospects for a tremendous extension of our trade with China were held out to this country, that many large factories were built expressly for this business, for the purpose of manufacturing the cotton goods mainly demanded in the Chinese markets, and these were added to all our already existing factories." — 4874. "How did this business come out?" — "Most disastrously, so that it defies almost every description; I do not believe, that of all the shipments to China in 1844 and 1845 more than two-thirds of the amount have ever returned; tea being the principal article of return export, and such great prospects having been held out to us, we manufacturers counted without fail on a large reduction of the tea tax." — And now, naively expressed, comes the characteristic confession of faith of the English manufacturer: "Our trade with a foreign market is not limited by its capacity of consuming our products, it is rather limited here at home by our capacity of consuming the products, which we receive in return for our industrial products." (The relatively poor countries, with whom England trades, are supposed to be able to pay for and consume any amount of English products, but unfortunately wealthy England cannot digest the products sent in return.) — 4876. "At first I shipped a few commodities out, and these were sold at a loss of about 15% in the full conviction that the price, at which my agents could buy tea,

would yield so large a profit through its sale here, that this loss would be made good; but instead of making a profit, I lost sometimes 25% and even as much as 50%." — 4877. "Did the manufacturers export for their own account?" — "Principally; the merchants, it seems, saw very soon that they did not make anything, and they encouraged the manufacturers to make consignments rather than to participate in them themselves." — In 1857, on the other hand, the losses and failures fell mainly upon the merchants, since the manufacturers left to them the task of overcrowding the foreign markets "for their own account."

An expansion of the money-capital arising from the fact that in consequence of the expansion of the banking business a former private hoard or coin reserve may be converted into loanable capital for a short while, does not indicate a growth of the productive capital any more than the increasing deposits of the London stock banks, as soon as they began to pay interest on deposits. (See the example of Ipswich farther along, where in the course of a few years immediately preceding 1857 the deposits of the capitalist farmers were quadrupled.) So long as the scale of production remains the same, this expansion leads only to an abundance of the loanable money-capital compared to the productive. Hence the rate of interest is low.

After the process of reproduction has again reached that state of prosperity, which precedes that of overexertion, the commercial credit once more arrives at a great expansion, which has then indeed for its "sound" basis a flow of easy returns and more extended production. In this state the rate of interest is still low, although it rises above its minimum. This is in fact the only time, of which it may be said, that a low rate of interest, and consequently a relative abundance of loanable capital, coincide with a real expansion of industrial capital. The facility and regularity of the returns, together with an extensive commercial credit, secures the supply of loan capital in spite of the increased demand for it,

and prevents the level of the rate of interest from rising. Moreover, those knights now appear in large numbers, who work without any reserve capital, or even without any capital at all and operate wholly on a credit basis. To this is added the great expansion of the fixed capital of all forms, and the inauguration of vast masses of new enterprises of wide scope. The interest now rises to its average level. It arrives once more at its maximum, as soon as the new crisis comes in, when credit suddenly stops, payments are suspended, the process of reproduction is delayed, and a superabundance of industrial capital is unemployed, with the above-mentioned exceptions, while there is an almost absolute lack of loan capital.

On the whole, then, the movements of loan capital, as expressed in the rate of interest, tend in a direction opposite to that of industrial capital. That phase in which a low rate of interest rising just above its minimum coincides with an "improvement" and a growing confidence after a crisis, and particularly that phase, in which the rate of interest reaches its average level, midway between its minimum and maximum, are the only two periods in which an abundance of loan capital is available simultaneously with a great expansion of industrial capital. But at the beginning of the industrial cycle a low rate of interest coincides with a contraction, and at the end of an industrial cycle a high rate of interest coincides with a superabundance, of industrial capital. The low rate of interest, which indicates an "improvement," shows that commercial credit requires the assistance of banking credit but to a slight degree, because it still stands on its own legs.

The industrial cycle is of such a character, that the same cycle must periodically reproduce itself, once that the first impulse has been given.[100]

[100] [I have already stated in another place, that a change has taken place in the character of commercial crises since the last great universal one. The acute form of the periodical process, with its former decennial cycle, seems to have given way to a more chronic, long drawn, alternation between a relatively short and slight business improvement and a relatively long, undecided, depression, both of them differently distributed over the various industrial countries. But perhaps it is merely a matter of a prolongation of the duration of the cycle. In the childhood

In the condition of lassitude production sinks below the level, which it had reached in the preceding cycle, and for which the technical basis has now been laid. During prosperity, the middle period, it continues to develop on this basis. In the period of overproduction and swindle it exerts the productive forces to the utmost, even beyond the capitalistic limits of the process of production.

That means of payment are scarce during the period of crisis, goes without saying. The convertibility of bills of exchange has substituted itself for the metamorphosis of commodities themselves, and so much more so at such times, as a portion of the firms operates purely on credit. An ignorant and mistaken legislation, such as that of 1844–45, may intensify a money crisis. But no manner of bank legislation can abolish a crisis.

In a system of production, in which the entire connection of the process of reproduction rests upon credit, a crisis must obviously occur through a tremendous rush for means of payment, when credit suddenly ceases and nothing but cash payment goes. At first glance, therefore, the whole crisis seems to be merely a credit crisis and money crisis. And in fact it is but a question of the convertibility of bills of exchange into cash money. But the majority of these bills represent actual sales and purchases, and it is

of world commerce, 1815–1847, it can be shown that a crisis occurred about every fifth year; from 1847–1867 the cycle is decidedly decennial; is it possible, that we are now in the preparatory stage of a new world crash of unparalleled vehemence? Many things seem to indicate this. Since the last great universal crisis of 1867 many profound changes have taken place. The colossal extension of the means of transportation and communication — seagoing steamers, railroads, electric telegraphs, the Suez Canal — have made a real world market a fact. The former monopoly of England in industry has been matched by a number of competing industrial countries; infinitely greater and varied fields have been opened in all parts of the world for the investment of superfluous European capitals, so that it is far more distributed, and local overspeculation may be more easily overcome. By means of these things, the old breeding grounds of crises and opportunities for the growth of crises have been eliminated or strongly reduced. At the same time competition in the internal markets recedes before Kartels and trusts, while it is restricted in the international market by protective tariffs, with which all great industrial countries, England excepted, surround themselves. But these protective tariffs are nothing but preparations for the ultimate general industrial war, which shall decide the supremacy on the world market. Thus every element, which works against a repetition of the old crises, carries the germ of a far more tremendous future crisis in itself.— F. E.]

the extension of these far beyond the demands of society which is at the bottom of the whole crisis. At the same time an enormous quantity of these bills represents mere swindles, and this becomes apparent now, when they burst. There are furthermore unlucky speculations made with the money of other people. Finally there are commodity-capitals, which have either become depreciated or unsalable or returns that can never more be realized. This entire artificial system of forced expansion of the process of reproduction cannot, of course, be remedied by having some bank, like the Bank of England, give to the swindlers the needed capital in the shape of paper notes and buy up all the depreciated commodities at their old nominal values. Moreover, everything appears turned upside down here, since no real prices and their real basis appear in this paper world, but only bullion, metal coin, notes, bills of exchange, securities. Particularly in the centers, in which the whole money business of the country is crowded together, like London, this reversion becomes apparent; the entire process becomes unintelligible. It is not quite so in the industrial centers.

By the way, we make the following remarks about the superabundance of industrial capital, which shows itself during crises: The commodity-capital is in itself also a money-capital, that is, a definite sum of money expressed in the price of the commodities. As a use-value it is a definite quantity of useful objects, and there is a superfluity of them at the time of the crisis. But as a money-capital in itself, as a potential money-capital, it is subject to continual expansion and contraction. On the eve of a crisis, and during its sway, commodity-capital in its capacity as a potential money-capital is contracted. It represents less money-capital for its owner and his creditors (likewise as a security for bills of exchange and loans), than it did at the time when it was bought and when the discounts and loans made on it were transacted. If this is the meaning of the contention, that the money-capital of a country is reduced in times of stringency, it is identical with the statement, that the prices

of commodities have fallen. Such a collapse of prices merely balances their inflation in preceding periods.

The incomes of the unproductive classes and of those, who live on fixed incomes, remain for the greater part stationary during the inflation of prices going hand in hand with an overproduction and overspeculation. Hence their consuming capacity diminishes relatively, and with it their ability to reproduce that portion of the total reproduction, which should enter normally into consumption. Even though their demand should remain nominally the same, it decreases actually.

With reference to the imports and exports we remark, that all countries become successively implicated in a crisis, and that then it becomes evident, that all of them, with few exceptions, have exported and imported too much, so that there is a balance of payment against all of them. The trouble, therefore, is not with the balance of payment. For instance, England suffers from an export of gold. It has imported too much. But at the same time all other countries are overcrowded with English goods. They have also imported too much, or too much has been imported into them. (There is, indeed, a difference between that country, which exports on credit, and those countries, which export little or nothing on credit. But in that case, these last countries import on credit; and this is not the case only when commodities are sent to them on consignment.) The crisis may first break out in England, in that country which gives most of the credit and takes least of it, because the balance of payment due, which must be squared immediately, is against it, even though the general balance of trade is for it. This is explained partly by the credit which it has granted, partly by the mass of capitals loaned to foreign countries, so that a large quantity of returns come back to it in the shape of commodities, aside from actual trade returns. (However, the crisis broke out sometimes in America, that country in which most of the trade and capital credit is taken from England.) The crash in England, introduced and accompanied by an ex-

port of gold, settles England's balance of payment, partly by a bankruptcy of its importers (about which more is said farther on), partly by throwing off a portion of its commodity-capital at cut prices to foreign countries, partly by the sale of foreign securities, the purchase of English securities, etc. Now it is the turn of some other country. The balance of payment was momentarily in its favor. But now the time normally allowed between the balance of payment and balance of trade has been reduced by the crisis or entirely abolished. All payments are now supposed to be made immediately. The same thing is now repeated here. England now has a return of gold, the other country an export of gold. What appears in one country as excessive imports, appears in the other as excessive exports, and vice versa. But overimports and overexports have taken place in all countries (we are not alluding now to any crop failures, but to a general crisis); that is, there has been a general overproduction, promoted by credit and the inflation of prices that goes with it.

In 1857, the crisis broke out in the United States. An export of gold from England to America followed. But as soon as the inflation in America collapsed, the crisis broke out in England and the gold export went from America to England. The same took place between England and the continent. The balance of payment is in times of general crisis against every nation, at least against every commercially developed nation, but always the one succeeding the other, like firing in squads, as soon as the turn of each comes for making payments. And once the crisis has broken out, say, in England, it compresses the succession of these terms of payment into a very short period. It then becomes evident that all these nations have simultaneously overexported (and overproduced) and overimported (and overtraded), that prices were inflated in all of them, and credit overdrawn. And the same collapse follows in all of them. The phenomenon of gold exports then shows itself successively in all of them, and proves by this very generality, 1), that the gold exports are but an evidence of a crisis, not its cause; 2), that the succession, in which the gold exports take place in differ-

ent countries, indicates only the time when their turn has come to settle their affairs, the time when the crisis seizes them and causes an eruption of its latent forces.

It is characteristic for the English economic writers — and the economic literature worth mentioning since 1830 resolves itself mainly into a literature on currency, credit, crisis — that they look upon the exports of precious metals in times of crisis, in spite of the alteration of quotations on bills, merely from the standpoint of England, as a purely national phenomenon, and completely close their eyes against the fact, that all other European banks raise their rate of interest, when their own bank raises its in times of crisis, and that, when the cry of distress over the exports of gold is raised in their country today, it is taken up in America tomorrow and in Germany and France the day after.

In 1847, "the obligations of England had to be fulfilled" [mostly for corn]. "Unfortunately they were mostly fulfilled by bankruptcies." [The wealthy England got its breath by bankruptcies in its obligations toward the Continent and America.] "But so far as they were met by bankruptcies, they were fulfilled by the export of precious metals." (*Report of Committee on Bank Acts*, 1857.) In other words so far as a crisis is intensified by bank legislation, this legislation is a means of cheating the corn-exporting countries in periods of famine, robbing them first of their corn and then of the money for the corn. A prohibition of the export of corn in such periods and in such countries, which are themselves suffering more or less from stringencies, is, therefore, a very rational measure to thwart the above plan of the Bank of England for "meeting obligations on corn imports by bankruptcies." It is in that case much better that the corn producers and speculators should lose a portion of their profit for the good of their own country than their capital for the good of England.

It follows from the above, that the commodity-capital largely loses its capacity of representing potential money-capital during a crisis, and during periods of business depression in general. The same is true of fictitious capital,

interest-bearing papers, so far as they circulate in the stock exchanges as money-capital. Their price falls with a rise of interest. It falls furthermore through a general lack of credit, which compels their owner to throw them in masses on the market, in order to secure money. It falls, finally, in the case of stocks, partly in consequence of the spurious character of the enterprises which they represent, partly in consequence of a decrease of the revenues, for which they constitute drafts. The fictitious capital is enormously reduced in times of crisis, and with it the power of its owners to loan money on it in the market. However, the reduction of the money denomination of these securities in the stock exchange quotations has nothing to do with the actual capital which they represent, but very much indeed with the solvency of their owners.

CHAPTER XXXI.

MONEY-CAPITAL AND ACTUAL CAPITAL. II.

(Continued.)

We have not yet come to the end of the question, to what extent the accumulation of capital in the form of loanable money-capital coincides with the actual accumulation, the expansion of the process of reproduction.

The conversion of money into loanable money-capital is a far simpler matter than the transformation of money into productive capital. But two things should be distinguished here.

1). The mere conversion of money into money-capital;

2.) The conversion of capital or revenue into money, which is turned into loan capital.

It is only the last named point, which can imply a positive accumulation of loan capital connected with an actual accumulation of industrial capital.

1. *Conversion of Money into Loan Capital.*

We have already seen, that an accumulation of loan capital to the point of oversaturation may take place, which is connected with productive accumulation only to the extent that it stands in the opposite proportion to it. This is the case in two phases of the industrial cycle, namely first during the time, when the industrial capital in both its forms of productive and commodity-capital is contracted, that is, at the beginning of the cycle after a crisis; and secondly at the time, when the improvement begins without, however, demanding as yet very much bank credit for commercial capital. In the first case the money-capital, which was formerly employed in production and commerce, appears as unemployed loan capital; in the second case it appears employed to an increasing degree, but at a very low rate of interest, because then the industrial and commercial capitalist prescribes the conditions for the money capitalist. The superabundance of loan capital expresses in the first case a stagnation of industrial capital, and in the second a relative independence of commercial credit from banking credit, based on the fluidity of the returns, a short term of credit, and a preponderance of operations with one's own capital. The speculators, who count on the credit capital of other people, have not yet appeared upon the field; the people, who work with their own capital, are still far removed from an approximation to operations based purely on credit. In the first named phase the superfluity of loan capital is the direct opposite of the expression of actual accumulation. In the second phase it coincides with a renewed expansion of the process of reproduction, accompanies it, but is not its cause. The superabundance of loan capital is already decreasing, is only a relative one compared to the demand. In both cases the expansion of the actual process of accumulation is promoted by it, since the low interest, which coincides in the first case with low prices, in the second with slowly rising prices, increases that portion of the profit, which is transformed into profits of enterprise. This takes place still more when in-

terest rises to its average level during the height of the period of prosperity, when it has grown, but not in the same proportion as profit.

We have seen, on the other hand, that an accumulation of loan capital may take place without any actual accumulation, by mere technical means, such as an expansion and concentration of the banking system, a saving in the currency reserve, or in the reserve fund of private means of payment, which are then always converted into loan capital for a short time. Although this loan capital, which is also called floating capital for this reason, retains the form of loan capital only for short periods (and discount is supposed to be given for short periods only), it flows continually back and forth. If one withdraws it, another brings it along. The mass of loanable money-capital grows thus quite independently of the actual accumulation (we speak here quite generally of short-lived loans on bills and deposits, not of loans for a number of years).

B. C. 1857. Question 501. "What do you mean by floating capital?"—Answer of Mr. Weguelin, Governor of the Bank of England: "It is capital available for money loans on short time." . . . (502) Notes of the Bank of England . . . of the provincial banks, and the amount of money existing in the country.—Question: "It does not seem, from the testimony submitted to this Committee, provided you mean by floating capital the active circulation" [of the notes of the Bank of England] "as though there were any very considerable fluctuation in this active circulation?" [But there is a great difference, whether this active circulation is loaned by the money lender or advanced by the reproductive capitalist himself.] Weguelin's answer: "I include in the floating capital the reserves of the bankers, in which there is considerable fluctuation."—That is to say, there is considerable fluctuation in that portion of the deposits, which the bankers have not loaned out again, but which figures as their reserve, and for the greater part also as the reserve of the Bank of England, where they are deposited. Finally the same gentleman says that floating cap

ital is bullion, that is, bullion and hard cash (503).— It is truly wonderful, what a different meaning and different form all economic categories receive in this credit jargon of the money market. Floating capital is there the term for circulating capital, which is, of course, quite another thing, money is capital, bullion is capital, bank notes are currency, capital is a commodity, debts are commodities, and fixed capital is money invested in papers that are salable with difficulty!

"The stock banks of London . . . have increased their deposits from 8,850,774 pounds sterling in 1847 to 43,100,724 pounds sterling in 1857. . . . The evidences and testimonies placed before this Committee permit the conclusion, that a great part of this immense amount is derived from sources, which were formerly not available for this purpose; and that the custom of opening an account with the banker and depositing money with him has extended to numerous classes, that formerly did not invest their capital(!) in this manner. Mr. Rodwell, President of the Association of Provincial Private Banks" [distinguished from stock banks] "and delegated by it to testify before this Committee, states that in the region of Ipswich this custom has quadrupled of late among the capitalist farmers and small business men of that district; that nearly all farmers, even those paying only 50 pounds sterling of rent annually, now have deposits in banks. The mass of these deposits, of course, finds its way to employment in business, and gravitates particularly toward London, the center of commercial activity, where they are first employed in discounting bills and in making other loans to the customers of London bankers. But a large portion of them, which the bankers themselves cannot use immediately, pass into the hands of bill brokers, who give to the bankers commercial bills in their stead, which they have already discounted once before for people in London and in the provinces." (*B. C.* 1858, p. 8.)

In giving loans to the bill broker on bills which this broker has discounted once, the banker practically discounts them again; but in reality very many of these bills have already

been rediscounted by the bill broker, and he rediscounts new bills with the very same money, with which the banker rediscounts the bills of the bill broker. What this leads to is shown by the following passage: "Extensive fictitious credits have been created by accommodation bills and blank credits, and this was very much facilitated by the procedure of the provincial stock banks, that discounted such bills and then had them rediscounted by bill brokers in the London market, and at that solely on the strength of the bank's credit, without regard to the further quality of the bills." (L. c.)

Concerning this rediscounting and the help which these purely technical increase of loanable capital lends to credit swindlers, the following extract from the *"Economist"* is instructive: "During many years capital" [namely loanable money-capital] "accumulated in some districts of the country more rapidly than it could be employed, while in others the means of its investment grew faster than the capital itself. While the bankers in the agricultural districts thus found no opportunity to invest their deposits profitably and safely in their own region, those in the industrial districts and the commercial cities had more demand for capital than they could supply. The effect of these different conditions in the various districts has led in recent years to the rise and startlingly rapid extension of a new class of firms engaged in the distribution of capital, who, although generally called bill brokers, are in reality bankers on the very largest scale. The business of these firms is to assume, for definitely agreed periods and at definitely fixed interest, the surplus-capital of the banks in districts in which it could not be employed, just like the temporarily idle funds of stock companies and great commercial firms, and to loan this money at a higher rate of interest to the banks in districts where capital is more in demand; as a rule by rediscounting the bills of their customers. . . . In this way Lombard Street became the great center, in which the transfer of unemployed capital takes place from one part of the country, where it cannot be usefully employed, to another where it is in demand; and this applies to the different parts of the country as well as to

similarly situated individuals. Originally these transactions were almost exclusively limited to borrowing and lending on collateral acceptable to banks. But in proportion as the capital of the country increased rapidly and was more and more economised by the erection of banks, the funds at the disposal of discounting firms became so large that they undertook to make advances, first on dock warrants (storage bills on commodities in docks) and then also on bills of lading representing products that had not even arrived, although sometimes, if not regularly, bills of exchange had already been drawn against them at the produce brokers. This practice soon changed the entire character of the English business. The facilities thus offered by Lombard Street gave to the produce brokers in Mincing Lane a greatly enforced position; these gave in turn the entire advantage to the importing merchants; these last took so much advantage of it that, whereas 25 years previous a taking of credit on his bills of lading or even his dock warrants would have ruined the credit of a merchant, this practice became so general, that it may be considered as the rule, and no longer, as 25 years ago, as a rare exception. Yea, this system has been extended so far, that large sums have been taken up in Lombard Street on bills of exchange drawn against the *still growing* crops of distant colonies. The result of such accommodations was, that the import merchants expanded their foreign transactions and tied up their floating capital, with which they had hitherto carried on their business, in the most execrable of investments, colonial estates, over which they could exert little or no control. Thus we see the direct concatenation of credits. The capital of the country, which is collected in our agricultural districts, is laid down in small amounts as deposits in country banks, and centralised for investment in Lombard Street. But it has been utilised, first, for the extension of business in our mining and industrial districts by rediscounting bills on banks there; furthermore also for granting greater accommodations to importers of foreign products by loans on warrants and bills of lading, whereby the 'legitimate' merchants' capital of firms in foreign and colonial business was

released and made available for the most abominable kinds of investment in transmarine estates." (*Economist,* 1847, p. 1334.)

This is the "beautiful concatenation of credits." The rural depositor imagines to deposit only with his banker, and imagines furthermore that, when his banker lends to others, it is done to private persons whom he knows. He has not the slightest suspicion, that this banker places his deposit at the disposal of some London bill broker, over whose operations neither of them have the slightest control.

How great public enterprises, such as railroads, may momentarily increase the loan capital, owing to the circumstance that the deposited amounts always remain at the disposal of the bankers for a certain time until they are really used, we have already seen.

By the way, the mass of the loan capital is quite different from the quantity of the currency. By the quantity of the currency we mean here the sum of all bank notes and all hard cash existing and circulating in a country, including the bullion of precious metals. One portion of this quantity forms the reserves of the banks, an ever changing magnitude.

"On November 12, 1857" [the date of the suspension of the Bank Acts of 1844], "the total reserve of the Bank of England, including all branch banks, amounted to only 580,-751 pounds sterling; the sum of the deposits amounted at the same time to 22,500,000 pounds sterling, of which nearly 6,500,000 pounds sterling belonged to London bankers." (*B. C.,* 1858, p. LVII.)

The variations of the rate of interest (aside from those occurring in long periods, or from the difference of the rate of interest in different countries; the first named are conditioned in variations of the general rate of profit, the last named on differences in the rates of profit and on the development of credit) depend upon the supply of loan capital (all other circumstances, state of confidence, etc., being equal), that is, of the capital loaned in the form of money, hard cash,

and notes; this is distinguished from industrial capital, which in the shape of commodities is loaned by means of commercial credit among the agents of reproduction themselves.

However, the mass of this loanable capital is different from and independent of the mass of the circulating money.

If 20 pounds sterling were loaned five times per day, a money-capital of 100 pounds sterling would be loaned, and this would imply at the same time that these 20 pounds sterling would besides have to serve at least four times as means of purchase or payment; for if this were to take place without the intervention of purchase and payment, so that this sum would not represent at least four times the converted form of capital (commodities including labor-power), it would not be a capital of 100 pounds sterling, but only five claims of 20 pounds sterling each.

In countries with a developed credit we may assume, that all money-capital available for loaning exists in the form of deposits with banks and money lenders. This holds good at least for the business in a general way. Moreover, in times of good business, before speculation proper breaks loose, when credit is easy and confidence growing, the greater portion of the functions of circulation is settled by a simple transfer of credit, without the intervention of metal or paper money.

The mere possibility of large amounts of deposits with a relatively small quantity of currency, depends solely:

1) Upon the number of purchases and sales, which the same piece of money performs;

2) The number of its return wanderings, in which it goes back to the banks as a deposit, so that its repeated function as a means of payment and purchase is promoted through its renewed conversion into a deposit. For instance, a small dealer deposits weekly with his banker 100 pounds sterling in money; the banker pays with this a portion of a deposit to a manufacturer; this man in his turn pays it over to some laborers; these pay the small dealer with it, who deposits it again in the bank. The 100 pounds sterling deposited by this dealer have, therefore, served, first, in paying to a manufacturer a portion of his deposit; secondly, in paying some

laborers; thirdly, in paying the dealer himself; fourthly, in depositing another portion of the money-capital of the same small dealer; for at the end of twenty weeks, provided that he does not have to draw any of his money out of the bank, he would have deposited 2,000 pounds sterling in the bank by means of the same 100 pounds sterling.

To what extent this money-capital is unemployed, is shown only in the inward and outward movements of the banking reserves. Therefore Mr. Weguelin, Governor of the Bank of England in 1857, concludes that the gold of the Bank of England is the "only" reserve capital.—1258. "In my opinion the rate of discount is actually determined by the amount of unemployed capital existing in the country. The amount of unemployed capital is represented by the reserve of the Bank of England, which is in fact a gold reserve. Hence, when gold is exported, the amount of unemployed capital in the country is diminished and the value of the remaining parts is thereby increased."—1364. "The gold reserve of the Bank of England is in fact the central reserve, or the cash fund, on the basis of which the entire business of the country is carried on. . . . It is this fund, or this reservoir, upon which the effect of the foreign quotations on 'Change always fall." (*Report on Bank Acts*, 1857.)

For the accumulation of the actual, this is, productive and commodity-capital, the statistics of exports and imports furnish a measure. These show always that during the decennial cycles of the period of development of British industry from 1815 to 1870 the maximum of the last time of prosperity always reappears before the crisis, whereupon it rises to a new and far higher maximum.

The actual or declared value of the exported products of Great Britain and Ireland in the prosperous year 1824 was 40,396,300 pounds sterling. The amount of the exports falls thereupon with the crisis of 1825 below this sum and fluctuates between 35 and 39 millions annually. With the return

of prosperity in 1834 the amount of exports rises above the former maximum to 41,649,191 pounds sterling, and reaches in 1836 the new maximum of 53,368,571 pounds sterling. In 1837 it falls again to 42 millions, so that the new minimum stands higher than the old maximum, and fluctuates thereupon between 50 and 53 millions. The return of prosperity lifts the amount of exports in 1844 to 58,500,000 pounds sterling, a rise far above the maximum of 1836. In 1845 it reaches 60,111,082 pounds sterling; then it falls to something over 57 millions in 1846, reaches in 1847 almost 59 millions, in 1848 about 53 millions, rises in 1849 to 63,500,000, in 1853 to nearly 99 millions, in 1854 to 97 millions, in 1855 to 94,500,000, in 1856 almost 116 millions, and reaches a maximum of 122 millions in 1857. It falls in 1858 to 116 millions, rises already in 1859 to 130 millions, in 1860 to nearly 136 millions, in 1861 only 125 millions (the new minimum is here again higher than the former maximum), in 1863 to 146,500,000.

Of course, the same thing might be demonstrated in the case of imports, which show the extension of the market; but we are here concerned only in the scale of production. [Of course, this holds good of England only for the time of its actual industrial monopoly; but it applies quite generally to the whole complex of countries with modern great industries, so long as the world market is still expanding.— F. E.]

Conversion of Capital or Revenue into Money that is Transformed into Loan Capital.

We will consider the accumulation of money-capital here in so far as it is not an expression, either of a relaxation in the flow of credit, or of greater economy, whether it be an economy in the actually circulating medium or in the reserve capital of the agents engaged in reproduction.

Aside from these two cases, an accumulation of money-capital may arise through extraordinary imports of gold, such as those of 1852 and 1853 resulting from the output of the new Australian and Californian mines. This gold was de-

posited in the Bank of England. The depositors took notes instead, which they did not at once redeposit in banks. By this means the circulating medium was unusually increased. (*Testimony of Weguelin, B. C.* 1857, No. 1329.)

The Bank strove to utilise these deposits by lowering its discount to 2%. The mass of gold accumulated in the Bank rose during six months of 1853 to 22 or 23 millions.

The accumulation of all capitalists lending money naturally takes place always in the form of direct money, whereas we have seen that the actual accumulation of industrial capitalists is accomplished, as a rule, by an increase of the elements of reproductive capital itself. Hence the development of the credit system and the enormous concentration of the money-lending business into the hands of great banks must by itself alone accelerate the accumulation of loanable capital, as a form distinguished from actual accumulation. This rapid development of loan capital is, therefore, a result of actual accumulation, for it is a consequence of the development of the process of reproduction, and the profit that forms the source of accumulation for these money-capitalists is but a deduction from the surplus-value, which the reproductive capitalists filch from production (and it is at the same time a portion of the interest on the savings of others). The loan capital accumulates at the expense of both the industrial and commercial capitalists. We have seen that in the unfavorable phases of the industrial cycle the rate of interest may rise so high, that it temporarily devours the whole profit in particularly handicapped lines of business. At the same time the prices of the public securities and other securities also fall. It is at such times that the money-capitalists buy up these depreciated papers in masses, which soon regain their former level in later phases or rise above it. Then they are sold again and a portion of the money-capital of the public appropriated through them. That portion, which is not sold yields a higher interest, because it was bought below price. But the money-capitalists convert all profits made by them and reconverted into capital first into loanable money-capital. An accumulation of such money-capital, as distin-

guished from the actual accumulation that is its mother, takes place, obviously, even if we consider only the money-capitalists, bankers, etc., by themselves, that is, an accumulation of this particular class of capitalists. And it must grow with every expansion of the credit system such as goes with the expansion of the process of reproduction.

If the rate of interest is low, then the depreciation of the money-capital falls principally upon the depositors, not upon the banks. Before the development of stock banks three-fourths of all deposits rested in the English banks without returning any interest. If interest is now paid on them, it amounts to at least 1% less than the current rate of interest.

As for the money accumulation of the other classes of capitalists, we leave aside that portion of it, which is invested in interest-bearing papers and accumulates in this form. We consider merely that portion, which is thrown upon the market as loanable money-capital.

In the first place, we have here that portion of the profit, which is not spent as revenue, but intended for accumulation, yet at the same time not immediately of any use for the industrial capitalists in their own business. This profit exists originally in the form of commodity-capital, a part of whose value it constitutes, and is realised with it in money. Now, if it is not reconverted into the productive elements of commodity-capital (we leave out of consideration for the present the merchant, whom we shall have to discuss separately), then it must remain for a while in the form of money. This mass increases with the mass of capital itself, even when the rate of profit declines. That portion, which is to be spent as revenue, is gradually consumed, but forms in the meantime a loan capital of the banker in the form of a deposit. Thus even the growth of that portion of profit, which is spent as revenue, expresses itself in a gradual and continually repeated accumulation of loan capital. The same is true of that other portion, which is intended for accumulation. With the development of the credit system, then, and its organisation, even the increase of revenue, that is, of the consumption of the industrial and commercial capitalists, expresses

itself as an accumulation of loan capital. And this holds good of all revenues which are consumed gradually, in other words, of ground rent, wages in their higher form, incomes of unproductive classes, etc. All of them assume for a certain time the form of a money revenue and are, therefore, convertible into deposits and thus into loan capital. All revenue, whether it be intended for consumption or accumulation, so long as it exists in some form of money, is a part of the value of commodity-capital transformed into money, and is, for this reason, an expression and result of the actual accumulation, but not the productive capital itself. When a spinner has exchanged his yarn for cotton, while he has exchanged that portion, which forms his revenue, for money, then the real existence of his industrial capital is the yarn, which has passed into the hands of the weaver or, perhaps, of some private consumer, and this yarn is the existence of both the capital-value and surplus-value contained in it, whether it be intended for reproduction or consumption. The magnitude of the surplus-value transformed into money depends upon the magnitude of the surplus-value contained in the yarn. But as soon as it has been transformed into money, this money is but the existence of the value of this surplus-value. And as such it becomes an element of loan capital. To this end nothing more is required than that it should be transformed into a deposit, if it has not been loaned out by its owner. But in order to be reconverted into productive capital, it must have reached a certain minimum limit.

CHAPTER XXXII.

MONEY-CAPITAL AND ACTUAL CAPITAL. III.

(Concluded.)

The mass of the money thus reconverted into capital is a result of the voluminous process of reproduction, but considered by itself, as loanable money-capital, it is not itself a mass of reproductive capital.

The most important point of our presentation so far is, that the expansion of that part of the revenue which is intended for consumption (leaving out of consideration the laborer, because his revenue is equal to the variable capital) represents itself in the first instance as an accumulation of money-capital. The accumulation of money-capital, therefore, presents a factor, which is essentially different from the actual accumulation of industrial capital; for that portion of the annual product, which is intended for consumption, does not become capital in any way. One portion of it replaces capital, namely the constant capital of the producers of means of consumption, but to the extent that it is actually converted into capital, it exists in the natural form of the revenue of the producers of this constant capital. The same money, which represents the revenue and serves merely for the promotion of consumption, is regularly transformed into loanable money-capital, for a certain time. So far as this money represents wages, it is at the same time the money-form of the variable capital; and so far as it replaces the constant capital of the producers of means of consumption, it is the money-form temporarily assumed by their constant capital and serves for the purchase of the natural elements of the constant capital to be replaced by them. Neither in the one nor in the other form does it express in itself any accumulation, although its mass increases with the volume of the proc-

ess of reproduction. But it performs temporarily the function of loanable money, of money-capital. In this respect the accumulation of money-capital must reflect a greater accumulation of capital than is actually existing, owing to the fact that the extension of individual consumption, being promoted by money, appears as an accumulation of money-capital, whereby it furnishes the money-form for the actual accumulation of money opening new investments of capital.

The accumulation of money, then, expresses in part nothing else but the fact that all money, into which the industrial capital is transformed in the course of its cycle, assumes the form, not of money *advanced* by the reproductive capitalists, but of money *borrowed* by them; so that indeed the advance of money necessary in the process of reproduction appears as an advance of borrowed money. On the basis of commercial credit one capitalist loans indeed to another the money required for the process of reproduction. But this assumes now the form of a transaction, in which the banker, who receives the money as a loan from one portion of the reproductive capitalists, lends it to another portion of these reproductive capitalists, so that the banker appears in the role of a dispenser of blessings; at the same time the disposition of this capital drifts wholly into the hands of the banker in his capacity as a middleman.

A few special forms of accumulation of money-capital still remain to be mentioned. Capital is released, for instance, by a fall in the price of the elements of production, raw materials, etc. If the industrial capitalist cannot expand his process of reproduction immediately, then a portion of his money-capital is expelled from the cycle as superfluous and converted into loanable money-capital. In the second place, capital in the form of money is released especially by the merchant, whenever any interruption of his business takes place. If the merchant has disposed of a series of transactions and cannot begin a new series on account of such interruptions until later, then his realised money represents for him but a hoard, superfluous capital. But at the same time it represents directly an accumulation of loanable money-

capital. In the first case, the accumulation of money-capital expresses a repetition of the process of reproduction under more favorable conditions, an actual release of a portion of formerly tied up capital, in other words, an opportunity for expanding the process of reproduction with the same amount of money. But in the other case it expresses merely an interruption in the flow of transactions. However, in both cases it is converted into loanable money-capital, represents its accumulation, influences equally the money-market and the rate of interest, although it expresses a promotion of the accumulation in the actual process in one case and its obstruction in the other. Finally an accumulation of money-capital is brought about by that section of people, who have made their little pile and have withdrawn from reproduction. In proportion as more profits are made in the course of the industrial cycle, their number increases. In their case the accumulation of loanable money-capital expresses on the one hand an actual accumulation (considering its relative volume), and on the other hand the extent of the transformation of industrial capitalists into mere money-capitalists.

As for the other portion of profit, which is not intended to be consumed as revenue, it is converted into money-capital only when it is not immediately able to find a place for investment in the expansion of the productive sphere in which it has been made. This may be due to two causes. Either the sphere of production may be saturated with capital. Or it may be because accumulation must first have reached a certain volume, before it can serve as capital, according to the proportions of the investment of new capital required in this particular sphere. Hence it is converted for a while into loanable money-capital and serves in the expansion of production in other spheres. Assuming all other circumstances to remain unaltered, the mass of profits required for reconversion into capital will depend on the mass of profits made and thus on the extension of the process of reproduction itself. But if this new accumulation meets with difficulties in its employment, through a lack of spheres for investment, due to the overcrowding of the lines of production and an oversupply

of loan capital, then such a plethora of loanable money-capital proves merely that capitalist production has its limits. The subsequent swindle with credit proves, that no positive obstacle stands in the way of the employment of this superfluous capital. The obstacle is merely one immanent in its laws of self-expansion, namely the limits in which capital can expand itself as such. A plethora of money-capital does not necessarily indicate an overproduction, nor even a lack of spheres of investment for capital.

The accumulation of loan-capital consists simply in the fact that money is precipitated as loanable money. This process is very different from an actual transformation into capital; it is merely the accumulation of money in a form, in which it may be invested as capital. But this accumulation may, as we have shown, indicate facts, which are greatly different from actual accumulation. So long as actual accumulation is continually expanding, this extended accumulation of money-capital may be partly its result, partly the result of circumstances, which accompany it but are quite different from it, partly also the result of impediments to actual accumulation. Since accumulation of loan-capital is swelled by such circumstances, which are independent of actual accumulation but nevertheless accompany it, there must be a plethora of money-capital in definite phases of the cycle for this reason alone, if for no other, and this plethora must develop with the organisation of credit. And simultaneously with it must also develop the necessity of driving the process of production beyond its capitalistic limits, by overproduction, excessive commerce, extreme credit. And this must take place in forms that call forth a reaction.

So far as accumulation of money-capital from ground rent, wages, etc., is concerned, it is superfluous to discuss that here. Only one thing must be mentioned, namely that the business of actual saving and abstinence (by people forming hoards), to the extent that it furnishes elements of accumulation, is left in the division of labor, which comes with the progress of capitalist production, to those who receive the smallest share of such elements, and who frequently enough lose even their

savings, as do the laborers when banks fail. On the one hand the capital of the industrial capitalist is not "saved" by himself, but he has command of the savings of others in proportion to the magnitude of his capital; on the other hand the money-capitalist makes of the savings of others his own capital, and of the credit, which the reproductive capitalists give to one another, and which the public gives to them, a source for enriching himself. The last illusion of the capitalist system, to the effect that capital is the fruit of ones own labor and saving, is thereby destroyed. Not only does profit consist of the appropriation of other people's labor, but the capital, with which this labor of others is set in motion and exploited, consists of other people's property, which the money-capitalist places at the disposal of the industrial capitalist, at the same time exploiting the latter in his turn.

A few remarks remain to be made about credit-capital.

How often the same piece of money may figure as a loan capital, depends, as we have previously indicated.

1) On the question, how often it realises the values of commodities by sale or purchase, thereby transferring capital, and furthermore on the question, how often it realises revenue. How often it gets into other hands as a realised value, either of capital or of revenue, depends, therefore, obviously, upon the volume and mass of the actual transactions;

2) On the economy of payments and on the development and organisation of the credit-system;

3) On the concatenation and velocity of action of the credits, so that a deposit set down at one point starts off immediately as a loan at another.

Even assuming that the form, in which loan capital exists, is merely that of actual money, of gold or silver, of that commodity whose substance serves as a measure of value, a large portion of this money-capital is necessarily purely fictitious, that is, a title to some value just as the tokens of value. So far as money functions in the cycle of capital, it forms indeed for the moment a money-capital; but it does not convert itself into loanable money-capital; it is rather exchanged for the elements of productive capital, or paid out as a medium of

circulation in the realisation of revenue, and cannot, therefore, convert itself into loan capital for its owner. But so far as it is converted into loan capital, and the same money repeatedly represents loan capital, it is evident that it exists only at one point in the form of metallic money; at all other points it exists only in the form of titles on capital. The accumulation of these titles, according to our analysis, arises from the actual accumulation, that is, from the transformation of the values of commodity-capital, etc., into money; but nevertheless the accumulation of these titles as such differs from the actual accumulation, from which it arises, and from the future accumulation (the new process of production), which is promoted by the loaning of this money.

In the first instance loan capital exists always in the form of money,[101] later as a title on money, since the money, in which it originally existed, is now held in the hand of the borrower as actual money. For the lender it has been transformed into a title on money, a title of ownership. The same mass of actual money may, therefore, represent very different masses of money-capital. Mere money, whether it represent

[101] B. A. 1857. Testimony of Twells, banker. 4516. "As a banker, do you deal in capital or in money?"—"We deal in money."— 4517. "How are the deposits paid into your bank?"—"In money."— 4518. "How are they paid out?"—"In money."—"Might it be said, then, that they are anything else but money?"—"No."

Overstone (see chapter XXVI) tangles himself up continually between "capital" and "money." Value of money signifies with him also interest, in so far as it is determined by the mass of money; value of capital is supposed to be interest, so far as it is determined by the demand for productive capital and the profit made by it. He says, 4140. "The use of the term capital is very dangerous."— 4148. "The gold exports from England are a reduction of the quantity of money in the country, and this must naturally cause an increased demand in the money-market in general" [but not in the capital-market, according to this] — 4112. "In proportion as money leaves the country its quantity in the country is diminished. This diminution of the quantity remaining in the country creates an increased value of this money" [this signifies originally in his theory an increase in the value of money as money through a contraction of the currency, as compared to the values of commodities; in other words, an increase in the value of money is the same as a fall in the value of commodities. But since meanwhile even he has been convinced beyond peradventure, that the mass of the circulating money does not determine prices, it is now the contraction of money as a medium of circulation, which is supposed to raise its value as interest bearing capital, and thus the rate of interest]. "And this increased value of the still remaining money checks the export and continues, until it has brought back as much money as is necessary to restore the equilibrium."— A continuation of Overstone's contradictions follows later.

realised capital or realised revenue, becomes a loan capital through the simple act of loaning, by its conversion into a deposit, if we look upon the general form under a developed credit system. The deposit is a money-capital for the depositor. But in the hands of the banker it may be only a potential money-capital, which lies fallow in his strongbox instead of that of its owner.[102]

With the growth of material wealth grows the class of money-capitalists; on one side the number and the wealth of retiring capitalists living on their incomes increases; on the other hand the development of the credit system is promoted, and with it the number of bankers, money lenders, financiers, etc.

With the development of the available money-capital grows also the mass of interest-bearing papers, government bonds, stocks, etc., as we have shown previously. At the same time grows also the demand for available money-capital, since the

[102] At this point the confusion starts in to the effect that both of these things are "money," namely the deposit as a claim to a payment from the banker, and the deposited money in the hands of the banker. Banker Twells, before the Committee on Bank Acts of 1857, takes the following example: "I start in business with 10,000 pounds sterling. With 5000 pounds sterling I buy commodities and place them in my stock. The other 5000 pounds sterling I deposit with some banker, in order to draw upon them as I need them. But I still consider the total as my capital, although 5000 pounds sterling exist in the form of a deposit or money." (4528)— This gives rise to the following nice debate.— 4531. "Well, you have given your 5000 pounds sterling in bank notes to somebody else"—"Yes, Sir."— 4532. "Then he has 5000 pounds sterling in deposits?"—"Yes, Sir."— 4533. "And you have 5000 pounds sterling in deposits?"—"Quite right."— 4534. "He has 5000 pounds sterling in money, and you have 5000 pounds sterling in money?"—"Yes, Sir."— 4535. "But it is ultimately nothing but money?"—"No, Sir." This confusion is due, partly to the circumstance, that A, who has deposited 5000 pounds sterling, can draw on them and dispose of them as though he still had them. To that extent they serve him as a potential capital. In all cases, in which he draws on them, he destroys his deposit to that extent. If he draws out real money, and his own money has already been loaned to some one else, he is not paid with his own money, but with that of some other depositor. If he pays a debt to B with a check on his banker, and if banker of A has also a check on the banker of B, so that the two bankers merely exchange checks, then the money deposited by A has performed the function of money twice; first, in the hands of him who received the money deposited by A; secondly, in the hands of A himself. In this second function it is a balancing of claims of indebtedness (the claim of A on his banker, and the claim of this banker on the banker of B) without the intervention of money. Here the deposit acts twice as money, namely once as real money, and then as a claim on money. Mere titles to money may take the place of money only by a balancing of claims of indebtedness.

jobbers, who speculate in these securities, play a prominent role on the money-market. If all the purchases and sales of these papers were only an expression of actual investments of capital, it would be correct to say, that they can have no influence on the demand for loan capital, since, when A sells his paper, he draws exactly as much money as B puts into the paper. But even if the paper itself exists, though not the capital (at least not as money-capital) originally represented by it, it always creates to that extent a demand for such money-capital. But at any rate it is then money-capital, which was previously at the disposal of B and is not at the command of A.

B. A. 1857. No. 4886. "Is it in your opinion a correct statement of the causes determining the rate of discount, when I say that it is regulated by the quantity of capital existing on the market, which is available for the discounting of commercial bills, as distinguished from other kinds of securities?" [Chapman]: "No, I hold that the rate of interest is affected by all convertible securities of current character; it would be wrong to limit the question simply to the discounting of bills; for when there is a strong demand for money on consols [deposited] or even treasury notes, as was strongly the case of late, and at a much higher than the commercial rate of interest, it would be absurd to say that our commercial world is not influenced by it; it is very essentially touched by it."—4890. "When good and current securities, such as bankers accept, are on the market, and the owners take up money on them, it has surely an effect on the commercial world; for instance, I cannot expect that a man should give me his money at 5% on a commercial bill, when he can lend this money out at the same time at 6% on consols, etc.; it affects us in the same way; nobody can expect of me that I should discount his bills at 5½%, when I can lend my money out at 6%."—4892. "Of people, who buy securities as fixed investments of capital for 2,000, or 5,000, or 10,000 pounds sterling, we do not speak as though they had any essential influence upon the money-market. When you ask me for the rate of interest on [a deposit of] consols, I speak

of people, who transact business to the amount of hundreds of thousands, of so-called jobbers, who underwrite large amounts of public loans, or buy them on the market, and who must hold these papers until they can get rid of them at a profit; these people must take up money for this purpose."

With the development of the credit system great concentrated money-markets are created, such as London, which are at the same time the main seats of trade in such securities. The bankers place the money-capital of the public in masses at the disposal of this unsavory crowd of dealers, and thus this breed of gamblers multiplies. "Money is generally cheaper at the stock exchange than anywhere else," says the incumbent of the Governor's chair of the Bank of England in 1848 before the secret Committee of Lords, C. D. 1848, printed, 1857, No. 219.)

In the discussion of the interest-bearing capital we have already shown, that the average interest for a long period of years, other circumstances remaining the same, is determined by the average rate of profit; this does not mean profits of enterprise, which are themselves nothing but profit minus interest.

It has also been mentioned, and will be further analysed in another place, that the variations of commercial interest, that is, of interest calculated by the money lenders for discounts and loans within the commercial world, meet in the course of the industrial cycle a phase, in which the rate of interest exceeds its minimum and reaches its average level, which it exceeds later, and that this movement is a result of a rise in profits.

However, two things must be noted here.

First: When the rate of interest stays up for a long time (we are speaking here of the rate of interest of a certain country, for instance England, where the average rate of interest is a fact for a certain long time, and presents itself also in the interest paid on loans for a long period, called private interest), it is an evident proof of the fact, that the rate of profit is high during this period, but it does not prove necessarily, that the rate of profits of enterprise is high. This last distinction

is more or less removed for capitalists, who operate mainly with their own capital; they realise the high rate of profit, since they pay their own interest. The possibility of a high rate of interest of long duration is present when the rate of profit is high; this does not refer, however, to the phase of the actual stringency. But it is possible, that this high rate of profit may leave but a low rate of profit of enterprise, after the high rate of interest has been deducted. The rate of profit of enterprise may shrink, while the high rate of profit continues. This is possible, because the enterprises must be continued after they have once been started. During this phase operations are carried on to a large extent with a pure credit capital (capital of other people); and the high rate of profit may be speculative, prospective, in some places. A high rate of interest may be paid with a high rate of profit, while profit of enterprise is declining. It may be paid (and this is done in part during times of speculation), not out of the profit, but out of the borrowed capital of another, and this may continue for a long time.

Secondly: The expression, that the demand for money-capital, and with it the rate of interest, grows, while the rate of profit is high, is not the same as that which is to the effect that the demand for industrial capital grows and with it the rate of interest is high.

In times of crisis the demand for loan capital, and with it the rate of interest, reach their maximum; the rate of profit, and with it the demand for industrial capital, are almost gone. In such times every one borrows only for the purpose of paying, in order to settle previously contracted obligations. On the other hand, in times of renewed activity after a crisis, loan capital is demanded for the purpose of buying, and for the purpose of transforming money-capital into productive and commodity-capital. And then it is in demand either by the industrial capitalist or the merchant. The industrial capitalist invests it in means of production and in labor-power.

The rising demand for labor-power can never be by itself a cause for a rising rate of interest, so far as this is determined by the rate of profit. A higher wage is never a cause of

higher profits, although it may be one of the consequences of higher profits, in some particular phases of the industrial cycle.

The demand for labor-power may increase, because the exploitation of labor takes place under especially favorable circumstances, but the rising demand for labor-power, and thus for variable capital, does not in itself increase the profit; it rather lowers it to that extent. But the demand for variable capital may nevertheless increase with the demand for labor-power, and to that extent the demand for money-capital, and this may raise the rate of interest. The market price of labor-power then rises above its average, more than the average number of laborers are employed, and the rate of interest rises at the same time, because the demand for money-capital rises under such circumstances. The rising demand for labor-power makes this commodity dearer like any other, increases its price, but not the profit, which rests mainly upon the relative cheapness of just this commodity. But it raises under the given assumptions also the rate of interest, because it increases the demand for money-capital. If the money-capitalist, instead of loaning the money, should transform himself into an industrial capitalist, then the fact that he has to pay more for labor-power would not increase his profit, but would rather decrease it in proportion. The constellation of conditions may be such, that his profit may rise nevertheless, but it will be in spite of the fact that he pays more for labor-power, and not because of it. This last circumstance, so far as it increases the demand for money-capital, is on the other hand sufficient to raise the rate of interest. If wages should rise for some reasons while the constellation is unfavorable, then the rise in wages would lower the rate of profit, but raise the rate of interest in proportion as it would increase the demand for money-capital.

Leaving the question of labor aside, the thing called "demand for capital" by Overstone consists only in a demand for commodities. The demand for commodities raises their price, either because it may rise above the average, or because the supply of commodities may fall below the average.

If the industrial capitalist or the merchant must now pay 150 pounds sterling for the same mass of commodities for which he used to pay 100 pounds sterling, he would have to borrow 150 pounds sterling whereas he had to borrow but 100 pounds sterling formerly, and if the rate of interest were 5%, he would now have to pay 7½ pounds sterling of interest as against 5 pounds sterling of former times. The mass of the interest to be paid by him would rise because he now has to borrow more capital.

The whole attempt of Mr. Overstone consists in pretending that the interests of loan capital and of industrial capital are identical whereas his Bank Acts are precisely calculated to exploit the difference of these interests for the benefit of money-capital.

It is possible, that the demand for commodities, in case their supply has fallen below average, does not absorb any more money-capital than formerly. The same sum, or perhaps a smaller one, has to be paid for their total value, but a smaller quantity of use-values is received for the same sum. In this case the demand for loanable money-capital will remain the same, and the rate of interest will not rise, although the demand for commodities would have risen as compared to their supply, and consequently the price of commodities would have become higher. The rate of interest cannot be touched, unless the total demand for loan capital increases, and this is not the case under the above assumption.

The supply of an article may also fall below average, as it does in case of crop failures of corn, cotton, etc., and the demand for loan capital may increase, because the speculation in these commodities calculates on a rise in their prices and the first means of making them rise is to curtail for a while a portion of their supply on the market. But in order to pay for the bought commodities without selling them, money is secured by means of the commercial bill system. In this case the demand for loan capital increases, and the rate of interest may rise in consequence of this attempt to prevent by artificial means the supply of this commodity to the market. The

higher rate of interest expresses in that case an artificial reduction of the supply of commodity-capital.

On the other hand the demand for an article may rise, because its supply has increased and the article stands below its average price.

In this case the demand for loan-capital may remain the same or may even fall, because more commodities can be had for the same sum of money. A speculative formation of a supply might also occur, either for the purpose of taking advantage of a favorable moment for the ends of production, or in expectation of a future rise in prices. In this case the demand for loan capital might grow, and the rise in the rate of interest would then be an expression of an investment of capital in the formation of an extra supply of elements of productive capital. We consider here merely that demand for loan capital, which is influenced by the demand and supply of commodity-capital. We have explained on a previous occasion, that the changing condition of the process of reproduction in the phases of the industrial cycle has its effect upon the supply of loan capital. The trivial statement to the effect that the market rate of interest is determined by the supply and demand of (loan) capital, is shrewdly mixed up by Overstone with his own assumption, according to which loan capital is identical with capital in general, and in this way he tries to transform the usurer into the only capitalist and his capital into the only capital.

In times of stringency the demand after loan capital is a demand for means of payment and nothing else; it is by no means a demand for money as a means of payment. The rate of interest may rise very high at the same time, regardless of whether real capital, that is, productive and commodity-capital, exists in abundance or is scarce. The demand for means of payment is a mere demand for convertibility into money, to the extent that the merchants and producers can offer good security; it is a demand for money-capital in so far as it is not this other, in other words, so far as an advance of means of payment gives them not merely the form

of money, but also the equivalent which they lack for making payment in whatever form. This is the point, where both sides of the current theory are right and wrong in their opinion about crisis. Those who say that there is merely a lack of means of payment, have either the owners of bona fide securities alone in view, or they are fools who believe that it is the duty and power of banks to transform all bankrupt swindlers into solvent and solid capitalists by means of pieces of paper. Those who say that there is merely a lack of capital, are either harping on words, since in such times there is a mass of *inconvertible* capital in consequence of over-imports and overproduction, or they are referring only to such knights of credit as are now placed in conditions, where they cannot any longer get other people's capital for their operations, and who now demand that the bank should not only help them to pay for the lost capital, but also enable them to continue their swindling.

It is a basic principle of capitalist production, that the money, as an independent form of value, must stand opposed to commodities, or that exchange-value must assume an independent form in money, and this is possible only by making of one definite commodity the material, whose value measures all other commodities, so that it thus becomes the general commodity, the commodity par excellence as distinguished from all other commodities. This must become evident in two respects, particularly among capitalistically developed nations, who substitute other things for large masses of money, partly through credit operations, partly through credit money. In times of stringency, when credit shrinks or ceases entirely, money suddenly becomes the only means of payment and the only true existence of absolute value as opposed to all other commodities. Hence a universal depreciation of commodities, difficulty or even impossibility of transforming them into money, that is, into their own purely phantastic form. In the second place, credit money itself is but money in so far as it absolutely takes the place of actual money to the amount of its nominal value. With the export of gold its own convertibility becomes problematical, that is, its identity with

actual money. Hence forcible measures, raising of the rate of interest, etc., for the purpose of safeguarding the conditions of this convertibility. This may be carried more or less to excess by mistaken legislation, resting upon false theories of money and enforced upon the nation by the interests of the money dealers, of Overstone and his like. The basis, however, is given with the basis of the mode of production itself. A depreciation of credit money (not to mention its imaginary depreciation) would unsettle all existing relations. The value of commodities is therefore sacrificed, for the purpose of safeguarding the phantastic and independent existence of this value in money. As money-value it is secured only so long as money itself is secure. For the sake of a few millions of money many millions of commodities must therefore be sacrificed. This is inevitable under capitalist production and constitutes one of its beauties. In former modes of production this does not occur, because on the narrow basis, upon which they move, neither credit nor credit money can develop to any extent. So long as the social character of labor appears as the money-existence of commodities, and thus as a thing outside of actual production, money crises are inevitable, either independently of crises or intensifying them. On the other hand it is obvious that, so long as the credit of a bank is not shaken, it will alleviate the panic in such cases by increasing the credit money, and intensify it by contracting this money. All history of modern industry shows that metal would indeed be required only for the balancing of international commerce, whenever its equilibrium is disturbed momentarily, if only national production were properly organised. That the inland market does not need any metal even now is shown by the suspension of cash payments of the so-called national banks, that resort to this expedient whenever extreme cases require it as the sole relief.

In the case of two individuals it would be ridiculous to say that both of them have a balance of payment against one another in their mutual transactions. If they are mutually creditors and debtors of one another, it is evident that to the extent that their claims do not balance, one must be the

creditor and the other the debtor for the remainder. But in the case of nations this is by no means so. And that it is not so is acknowledged by all economists through the statement, that the balance of payment may be for or against a nation, even if its balance of trade must ultimately be settled. The balance of payment differs from the balance of trade in so far as payment is a balance of trade which must be settled at a definite period. What crises accomplish is the crowding of the difference between the balance of payment and the balance of trade into a short time; and the definite conditions, which develop in the nation suffering from a crisis and facing the term when payment becomes due, carry with them such a contraction of the time of settlement. These conditions are, first the shipping away of precious metals; then the throwing away of consigned commodities; the exportation of commodities for the purpose of getting rid of them or of securing loans on them in the home market; the rising of the rate of interest, the calling in of credits, the falling of securities, the selling out of foreign securities, the attraction of foreign capital for investment in these depreciated securities, and finally bankruptcy, which settles a mass of obligations. While this is going on, metal is often sent for some time into the country, where a crisis has broken out, because bills of exchange on it are unsafe and payment is best made in metal. This is further explained by the fact that in the case of a country like Asia all capitalist nations are generally direct or indirect debtors of it at the same time. As soon as these different circumstances exert their full effect upon the other involved nation, it likewise begins its export of gold and silver on account of the expiration of the date of payment, and the same phenomena are repeated.

In commercial credit the interest, being the credit price as distinguished from the cash price, enters only in so far into the price of commodities as the bills of exchange have a longer running time than the ordinary. Otherwise it does not. And this is explained by the fact that every one takes credit with one hand and gives it with the other. [This does not agree with my experience. F. E.] But so far as discount

in this form enters into consideration here, it is not regulated by this commercial credit, but by the money-market.

If the demand and supply of money-capital, which determine the rate of interest, were identical with the demand and supply of actual capital, as Overstone maintains, then the interest would be simultaneously high or low according to different commodities, or different phases of the same commodity (raw material, partly finished product, finished product). In 1844 the rate of interest of the Bank of England fluctuated between 4% from January to September to 2½ and 3% from November to the end of the year. In 1845 it was 2½, 2¾, 3% from January to October, and between 3 and 5% during the remaining months. The average price of fair Orleans cotton was 6¼ d. in 1844 and 4⅝ d. in 1845. On March 3, 1844, the cotton supply in Liverpool was 627,042 bales, and on March 3, 1845, it was 773,800 bales. To judge by the low price of cotton, the rate of interest should have been low in 1845, and it was indeed for the greater part of this time. But to judge by the yarn the rate of interest should have been high, for the prices were relatively and the profit absolutely high. From cotton at 4 d. per pound a yarn could be spun in 1845 with a spinning cost of 4 d. (No. 40 good second mule twist), or a total cost of 8 d. to the spinner, which he could sell in September and October 1845 at 10½ or 11½ d. per pound. (See the testimony of Wylie farther on.)

This whole question may be decided by the following considerations:

A supply and demand of loan capital would be identical with a demand and supply of capital in general (although this last phrase is absurd; for the industrial or commercial capitalist a commodity is a form of his capital, yet he never asks for capital as such, but only for this particular commodity as such, buys and sells it as a commodity, corn or cotton, regardless of the role which it has to play in the rotation of his capital), if there were no money lenders, and if in their stead the lending capitalists were in possession of machinery, raw materials, etc., which they would rent or loan just as houses are now, to the industrial capitalists, who are them-

selves part owners of these things. Under such circumstances the supply of loan capital would be identical with the supply of elements of production for the industrial capitalist, and of commodities for the merchant. But it is evident, that then the division of profit between the lender and borrower would depend primarily upon the proportion, in which this capital is loaned and in which it is the property of the one who employs it.

According to Mr. Weguelin (B. A. 1857) the rate of interest is determined by "the mass of unemployed capital" (252); it is "but an index of the mass of unemployed capital seeking investment" (271); later this unemployed capital becomes a "floating capital" (485) and by this he means "notes of the Bank of England and other means of circulation in the country, for instance the notes of provincial banks and the coins existing in the country. . . . I include in the floating capital also the reserves of the banks" (502,503), and later he includes also gold bullion (503). Thus the same Mr. Weguelin says that the Bank of England has a great influence upon the rate of interest in times, when "we" (the Bank of England) actually have the greater portion of the unemployed capital in our hands (1198), while according to the above testimony of Mr. Overstone the Bank of England "is no place for capital." Mr. Weguelin further says: "In my opinion the rate of discount is regulated by the quantity of the unemployed capital in the country. The quantity of unemployed capital is represented by the reserve of the Bank of England, which is in fact a metal reserve. Hence when the metal hoard is reduced, it reduces the quantity of unemployed capital in the country and consequently raises the value of the remaining quantity." (1258.) J. Stuart Mill says, 1102: "The Bank is compelled, in order to keep its banking department solvent, to do its utmost to fill the reserve of this department, hence as soon as it finds that a drain begins, it must secure its reserve and either reduce its discounts or sell securities." — The reserve, so far as only the banking department is concerned, is a reserve for the deposits only. According to the Overstones the bank-

ing department is supposed to act only as a banker, without regard to any "automatic" issue of notes. But in times of actual stringency this institution, independently of the reserve of the banking department, which consists only of notes, keeps a sharp eye on the metal reserve, and must do so, if it would not fail. For in proportion as the metal reserve dwindles, disappears also the reserve of bank notes, and no one should know this better than Mr. Overstone, who has so wisely arranged this by his Bank Acts of 1844.

CHAPTER XXXIII.

THE CURRENCY UNDER THE CREDIT SYSTEM.

"THE great regulator of the velocity of circulation is credit. This explains, why a sharp stringency in the money-market generally coincides with a full circulation." (*The Currency Question Reviewed,* p. 65.) This is to be taken in a double sense. On one hand all methods, which save currency, are based upon credit. On the other hand, take, for instance, a 500 pound note. A gives it today to B in payment for a bill of exchange; B deposits it on the same day in his bank; his banker discounts with it on the same day a bill of exchange for C; C pays it to his bank, the bank gives it to the bill broker as a loan, etc. The velocity with which this note circulates here in purchases and sales is promoted by the velocity with which it always returns to some one in the form of a deposit and passes over to some one else in the form of a loan. The mere economising of the currency appears most highly developed in the Clearing House, the mere exchange of due bills of exchange, and the function of money preferentially as a means of payment for balancing mere remainders. But the existence of these bills rests itself upon credit, which the industrials and merchants mutually give to each other: If this credit declines, so does the number

of bills, particularly of long time ones, and consequently also the effectiveness of this method of balancing accounts. And this economy, which consists in the elimination of money from the transactions, and which rests entirely upon the function of money as a means of payment, which in its turn rests again upon credit, can be only of two kinds (aside from the more or less developed technique in the concentration of these payments): Mutual claims of indebtedness, represented by bills of exchange or checks, are balanced either by the same banker, who merely transcribes the claim from the account of one to that of another, or by different bankers squaring accounts against each other.[103]

The concentration of 8 to 10 million bills of exchange in the hands of one bill broker, such as the firm of Overend, Gurney & Co., was one of the principal means of expanding the scale of these balances locally. By this economy the effectiveness of the currency is increased, so far as a smaller quantity of it is required for the mere balancing of accounts. On the other hand the velocity of the money circulating as currency (by which it is likewise economised) depends entirely upon the flow of purchases and sales, or also on the concatenation of payments, so far as they are made successively in money. But credit promotes and increases the velocity of currency. A single piece of money, for instance, may perform only five rotations, and remains for a certain time in each hand, as a mere medium of circulation, without the intervention of credit, when A, its original owner, buys from B, then B from C, then C from D, then D from E, then E from F, that is, when its transition from one hand to another is due only to actual sales and purchases. But when B deposits the money received from A in his bank and his banker issues it in the discounting of bills to C, and he buys

[103] Average number of days, during which a bank note remained in circulation:

Year	5 p. Note	10 p. Note	20–100 p.	200–500 p.	1000 p.
1798	?	236	209	31	22
1818	148	137	121	18	13
1846	79	71	34	12	8
1856	70	58	27	9	7

Tabulation made by Marshall, Cashier of the Bank of England, in Report on Bank Acts, 1857, II, Appendix, p. 301–302.

from D, and D deposits it in his bank, and his banker lends it to E, who buys from F, then even its velocity as a mere medium of circulation (means of purchase) is promoted by several credit operations: the depositing of this money by B in his bank, the discounting of his banker for C, the depositing of D in his bank, and the discounting of this banker for E; four credit operations. Without these credit operations the same piece of money would not have performed five purchases successively in a given time. The fact that it changed hands without the promotion of actual sales and purchases, by deposits and discounts, has here accelerated its change of hands in the series of actual transactions.

We have seen previously, that one and the same bank note may be a deposit in different banks. It may also form different deposits in the same bank. The banker discounts with the note, which A has deposited, the bill of B, and B pays it over to C, who deposits the same note in the same bank that issued it.

We have already demonstrated in the discussion of the simple circulation of commodities (Volume I, Chapter III, 2), that the mass of the actually circulating money, assuming the velocity of currency and the economy of payments to be given, is determined by the prices of commodities and the mass of transactions. The same law rules the circulation of notes.

In the following table, the annual averages of the notes of the Bank of England are set down, so far as they were in the hands of the public, namely the amounts of 5 and 10 pound notes, those of 20 to 100 pound notes, and those of the larger notes between 200 and 1000 pounds sterling; together with the percentages of the total circulation supplied by each one of these classes. The amounts stand for thousands, the last three figures being left out.

YEAR	5–10 P. NOTES	%	20–100 P. NOTES	%	200–1000 P. NOTES	%	TOTALS
1844	9,263	45.7	5,735	28.3	5,253	26.0	20,241
1845	9,098	46.9	6,082	29.3	4,942	28.6	20,723
1846	9,918	48.9	5,771	28.5	4,590	22.6	20,286

YEAR	5–10 P. NOTES	%	20–100 P. NOTES	%	200–1000 P. NOTES	%	TOTALS
1847	9,591	50.1	5,498	28.7	4,066	21.2	19,155
1848	8,732	48.3	5,046	27.9	4,307	23.8	18,085
1849	8,692	47.2	5,234	28.5	4,777	24.3	18,403
1850	9,164	47.2	5,587	28.8	4,646	24.0	19,398
1851	9,362	48.8	5,554	28.5	4,557	23.4	19,473
1852	9,839	45.0	6,161	28.2	5,856	26.8	21,856
1853	10,699	47.3	6,393	28.2	5,541	24.5	22,653
1854	10,565	51.0	5,910	28.5	4,234	20.5	20,709
1855	10,628	53.6	5,706	28.9	3,459	17.5	19,793
1856	10,680	54.4	5,645	28.7	3,324	16.9	19,648
1857	10,659	54.7	5,567	28.6	3,241	16.7	19,467

(B. A. 1858, p. I, II.) The total mass of circulating bank notes has, therefore, positively decreased from 1844 to 1857, although the commercial business had more than doubled, as indicated by exports and imports. The smaller bank notes of 5 and 10 pounds sterling increased, as the table shows, from 9,263,000 in 1844 to 10,659,000 pounds sterling in 1857. And this took place simultaneously with the very heavy increase in the gold circulation of that time. On the other hand, there was a decrease of the notes of higher denominations (200 to 1000 pounds sterling) from 5,856,000 in 1852 to 3,241,000 pounds sterling in 1857, a decrease of more than 2½ millions. This is explained as follows: "On June 8, 1854, the private bankers of London permitted the stock banks to take part in the erection of the Clearing House, and soon after that the final clearing was established in the Bank of England. The daily balances were settled by transcribing them on the accounts, which the different banks keep in the Bank of England. By the introduction of this system the notes of high denomination, which the banks formerly used for balancing their mutual accounts, have become superfluous." (B. A. 1858, p. V.)

To what a small minimum the use of money in wholesale trade has been reduced, may be seen in the table published in Volume I, Chapter III, page 157, footnote 1, which was furnished to the Committee on Bank Acts by Morrison Dillon & Co., one of the largest of those London firms, from whom a small dealer can buy his entire stock of commodities of all kinds.

According to the testimony of W. Newmarch before the

B. A. 1857, No. 1741, still other circumstances contributed to the economy in currency: The penny postage, the railroads, the telegraphs, in short, the improved means of communication; so that England can now carry on a five to six times larger business with about the same circulation of bank notes. It is also declared to be due to a marked degree to the withdrawal of the notes of a higher denomination than 10 pounds sterling from the circulation. This appears to him as a natural explanation for the fact that in Scotland and Ireland, where also one pound notes circulate, the circulation of notes has risen by about 31% (1747). The total circulation of bank notes in the United Kingdom, including the one pound notes, is said to be 39 millions (1749). The gold circulation 70 millions (1750). In Scotland the circulation of notes was 3,120,000 pounds sterling in 1834; 3,020,000 pounds sterling in 1844; and 4,050,000 pounds sterling in 1854 (1752).

From these facts alone it is evident, that it lies by no means with the banks issuing notes to increase the number of circulating notes, so long as these notes are at all times exchangeable for money. [Inconvertible bank notes are not taken into consideration at all here; inconvertible bank notes can become universal means of circulation only under conditions, in which they are actually backed up by national credit, as is the case of Russia at present. In that case they fall under the laws of the inconvertible national paper money, which have been developed already in Volume I, Chapter III, 2, c, *Coin and Symbols of Value.*— F. E.]

The quantity of circulating notes is regulated by the requirements of commerce, and every superfluous note wanders back immediately to the issuing party. Since in England only the notes of the Bank of England circulate universally as the legal means of payment, we may neglect at this point the slight and merely local circulation of the provincial banks.

In B. A. 1858 Mr. Neave, Governor of the Bank of England testifies: No. 947. Question: "Whatever measures you may take, the amount of notes, you say, remains the same, that is, about 20 million pounds sterling?" — Answer:

"In ordinary times the wants of the public seem to require about 20 million pounds sterling." — At certain periodically recurring times each year this is increased by one or one and half millions. If the public needs more, they can always, as I said, get them from the Bank of England." — 948. "You said that during the panic the public did not want to allow you to reduce the amount of the notes; will you state your reasons?" — "In times of panic the public, it seems to me, has full power to secure notes; and of course, so long as the Bank has any obligation, the public can take notes from the Bank on this obligation." — 949. "It seems, then, that at all times about 20 million notes of the Bank of England are required?" — "20 million notes in the hands of the public; it changes. It is 18½, 19, 20 millions, etc.; but on an average you may say 19–20 millions."

Testimony of Thomas Tooke before the Committee of Lords on Commercial Distress (C. D. 1848–57) No. 3094: "The Bank has no power to expand the amount of its notes in the hands of the public at its own arbitrary will; it has the power to reduce the amount of notes in the hands of the public, but only by means of a very forcible operation."

J. C. Wright, for 30 years a banker in Nottingham, having explained at length the impossibility, that a provincial bank should be able to set more notes into circulation than the public needs, says of the notes of the Bank of England: (C. D. 1848–57) No. 2844: "I know of no limit" (for the issue of notes) "for the Bank of England, but every surplus of the circulation will pass over into the deposits and thus assume another form."

The same holds good for Scotland, where almost nothing but paper circulates, because there as well as in Ireland one pound notes are also in vogue and "the Scotch hate gold." Kennedy, Director of a Scotch bank, declares that banks cannot even contract their circulation of notes, and is "of opinion that, so long as inland transactions require notes or gold in order to be carried on, the bankers must furnish as much currency as these transactions need — either on demand of their depositors or otherwise. . . . The Scotch banks can

contract their business, but they cannot exert any control over their issue of notes." (Ibidem, No. 3446–48.) In like manner Anderson, Director of the Union Bank of Scotland, answers question No. 3678, asked ibidem: "Does the system of mutually exchanging notes" [among the Scotch banks] "prevent an overissue of notes on the part of the individual bank?" — "Yes; but we have a more effective means than the exchange of notes" [which has really nothing to do with this, but does indeed guarantee the ability of the notes of each bank to circulate throughout all of Scotland], "and that is the general custom in Scotland of keeping a bank account; every one who has any money at all has also an account in some bank and turns in daily all the money which he does not need immediately for himself, so that at the end of every business day all the money is in the banks, except what each carries in his pockets."

The same applies to Ireland, as shown by the testimony of the Governor of the Bank of Ireland, MacDonnell, and the Director of the Provincial Bank of England, Murray, before the same Committee.

The circulation of notes is just as independent of the state of the gold reserve in the cellars of the bank, which guarantees the convertibility of these notes, as it is of the will of the Bank of England. "On September 18, 1846, the circulation of the notes of the Bank of England was 20,900,000 pounds sterling and its metal reserve was 16,273,000 pounds sterling; on April 5, 1847, the circulation was 20,815,000 pounds sterling and the metal reserve was 10,246,000 pounds sterling. Hence no contraction of the currency took place in spite of the export of 6 million pounds sterling of precious metal." (J. G. Kinnear, *The Crisis and the Currency,* London, 1847, p. 5.) Of course, this applies only to the conditions which prevail in England at present, and even there only so far as legislation does not decide differently concerning the relation between the issue of notes and the metal reserve.

Hence only the requirements of business itself exert an influence on the quantity of circulating money — notes and gold. In the first instance the periodical fluctuations, which

repeat themselves every year, should be noted here, regardless of the general condition of business, so that for 20 years "in a certain month the circulation is high, in another low, and in a third definite month a middle point occurs." (Newmarch, B. A. 1857, No. 1650.)

For instance, in August of every year a few millions, generally in gold, pass from the Bank of England into inland circulation, in order to pay the expenses of the harvest; since the principal payments to be made here are wages, bank notes are less serviceable in England for this purpose. By the close of the year this money has returned to the Bank. In Scotland there are almost nothing but one pound notes instead of Sovereigns; in this case, then, it is the circulation of notes which is expanded during the aforesaid term, and at another, that is, twice a year, in May and November, by about 3 or 4 millions; within fourteen days the reflux begins, and it is almost completed in one month. (Anderson, l. c., No., 3595–3600.)

The circulation of the notes of the Bank of England also experiences every quarter a momentary fluctuation on account of the quarterly payment of the "dividends," that is, the interest on the national debt by which bank notes are first withdrawn from circulation and then once more distributed between the public. But they return very soon. Weguelin (B. A. 1857, No. 38) states that this fluctuation of the circulation of notes amounts to two and half millions. Mr. Chapman of the notorious firm of Overend, Gurney & Co., however, calculates the disturbance created by this fluctuation in the money market at a far higher figure. "If you take 6 or 7 millions for taxes out of the circulation, for the purpose of paying dividends with them, there must be somebody, who places this amount within reach in the meantime." (B. A. 1857, No. 5196.)

Far more considerable and lasting are the fluctuations in the amount of the currency corresponding to the various phases of the industrial cycle. Let us listen to another member of that firm, the worthy Quaker Samuel Gurney (C. D. 1848–57, No. 2645): "At the end of October (1847) there were

20,800,000 pounds sterling in notes in the hands of the public. At that time a great difficulty prevailed in the matter of securing bank notes in the money market. This arose from the general apprehension that it would not be possible to secure them on account of the limitation of the Bank Acts of 1844. At present [March, 1848] the amount of bank notes in the hands of the public is . . . 17,700,000 pounds sterling, but as there is no commercial alarm now, this is much more than is needed. There is no banker or no money dealer in London, who has not more bank notes than he can use." — 2650. "The amount of bank notes . . . out side of the keeping of the Bank of England forms a totally inadequate exponent of the actual state of the circulation, unless one considers at the same time . . . the condition of the commercial world and of credit." — 2651. "The feeling that we have a surplus at the present amount of currency in the hands of the public arises to a large degree from our present condition of great stagnation. With high prices and a brisk business 17,700,000 pounds sterling would give us a feeling of shortness."

[So long as the condition of business is such, that the returns on the loans given come in regularly and credit remains unshaken, the expansion and contraction of the currency depends simply upon the requirements of the industrials and merchants. Since gold does not enter into consideration in the wholesale trade, at least in England, and the circulation of gold aside from the fluctuations with the seasons, may be regarded as a rather constant magnitude for a long time, the circulation of the notes of the Bank of England forms a sufficiently accurate measure of these changes. In a dull period after a crisis the circulation is smallest, with the reanimation of the demand comes also a greater demand for currency, which increases with the rising prosperity; the quantity of currency reaches its culminating point in the period of overtension and overspeculation — suddenly the crisis breaks out and over night the bank notes, yesterday still so plentiful, have disappeared from the market and with them the discounters of bills, the lenders of money on securities, the buyers

of commodities. The Bank of England is called on for help — but even its powers are soon exhausted, the Bank Act of 1844 compels it to contract its circulation of notes at the very moment when all the world cries out for notes, when the owners of commodities cannot sell and yet are supposed to pay and are ready to make any sacrifice, if they can only secure bank notes. "During the alarm," says the above-mentioned banker Wright, l. c. No. 2930, "the country needs twice as much currency as in ordinary times, because the medium of circulation is stored up by bankers and others."

As soon as the crisis breaks out, it is henceforth only a question of means of payment. But since every one is dependent upon the other for the coming in of these means of payment, and no one knows whether the other will be able to meet his payments when due, a stampede takes place for the means of payment available on the market, that is, the bank notes. Every one accumulates as many of them as he can secure, and thus the notes disappear from the circulation on the very day when they are needed most. Samuel Gurney (C. D. 1848–57, No. 1116) states that the amount of bank notes brought under lock and key in a moment of such terror in October 1847 to have been 4 to 5 million pounds sterling. — F. E.]

In this connection, a special interest attaches to the cross-examination of the associate of Gurney, the aforementioned Chapman, before the B. A. of 1857. I reproduce its principal contents summarily, although it touches also upon certain other points, which we shall have to analyse later.

Mr. Chapman has the following to say:

4963. "I do not hesitate to say, that I do not consider it right, that the money market should be in the power of any one individual capitalist (such as exist in London), who can create an enormous scarcity of money and a stringency, when the circulation just happens to be low. . . . That is possible . . . there is more than one capitalist, who can take notes to the amount of one or two million pounds sterling out of the currency, when it suits his purpose." — 4995. A great speculator can sell one or two million pounds

worth of consols and thus take the money out of the market. Something similar to this has happened quite recently, "it creates a very violent crisis." —

4967. The notes are then indeed unproductive. "But that is nothing, when it serves a great purpose; its great purpose is to throw down the prices of funds, to create a money stringency, and to do that is quite within his power." — An illustration: One morning there was a great demand for money in the Money Exchange; nobody knew its cause; somebody asked Chapman to lend him 50,000 pounds sterling at 7%. Chapman was astonished, his rate of interest was much lower; he accepted. Soon after that the man returned, took up another 50,000 pounds sterling at 7½%, then, 100,000 at 8%, and wanted still more at 8½%. Then even Chapman became frightened. Later it was found out that suddenly a considerable sum of money had been withdrawn from the market. But, says Chapman, "nevertheless I had loaned out a considerable amount of money at 8%; I was afraid to go farther; I did not know what was coming."

It must not be forgotten, that, although 19 to 20 millions in notes are continually supposed to be in the hands of the public, nevertheless that portion of notes, which actually circulates, and on the other hand that portion, which is held unemployed by the banks as a reserve, continually differ considerably from one another. If this reserve is large, and therefore the actual circulation small, it means from the point of view of the money-market, that the circulation is full, money is plentiful; if the reserve is small, and the actual circulation full, then the language of the money-market says that the circulation is low, money is scarce, that is to say, the portion representing unemployed loan capital is small. A real expansion or contraction of the circulation in such a way, that it remains independent of the phases of the industrial cycle and leaves unchanged the amount needed by the public, occurs only for technical reasons, for instance, on the dates when taxes are due or the interest on a national debt. When taxes are paid, notes and gold beyond the ordinary amount flow into the Bank of England and practically contract the circulation

without regard to its needs. The reverse takes place when the interest on the national debt is paid. In the first case, loans are demanded from the bank in order to secure currency. In the last case, the rate of interest falls in the private banks on account of the momentary growth of their reserves. This has nothing to do with the absolute mass of currency, but only with the banking firm that sets this currency into circulation, and for whom this process represents itself as a loaning of loan capital, the profit of which it pockets.

In the one case there is a temporary displacement of the circulating medium, which the Bank of England balances by short loans at low interest shortly before the quarterly taxes or the quarterly dividends on the nationel debt become due; The issue of these supernumerary notes first fills up the gap caused by the payment of the taxes, while their return to the bank soon after brings back the excess of notes thrown into circulation by the payment of dividends to the public.

In the other case a low or full circulation means simply a different distribution of the same mass of currency into active circulation and deposits, which serve as an instrument of loans.

On the other hand, if the number of notes is increased by a flow of gold into the Bank of England, then these notes assist in the discounting of bills outside of the bank and return to it by the payment of loans, so that the absolute mass of the circulating notes is but momentarily increased.

If the circulation is full on account of the expansion of business (which may take place even though prices be relatively low), then the rate of interest may be relatively high on account of the demand for loan capital in consequence of rising profits and increased new investments. If it is low, on account of the contraction of business, or, perhaps, on account of a great fluidity of credit, then the rate of interest may be low even though prices be high. (See Hubbard.)

The absolute quantity of the circulation has a determining influence on the rate of interest only in times of stringency. The demand for a full circulation may either express merely a demand for means of hoarding (aside from the reduced ve-

locity of the circulation of money and that of the conversion of the same identical pieces of money into loan capital) owing to lack of credit, as was the case in 1847, when the suspension of the Bank Acts did not cause any expansion of the circulation, but sufficed to draw forth the hoarded notes and to throw them into circulation. Or it may be that more means of circulation are actually required under prevailing circumstances, as was the case in 1857, when the circulation actually expanded for some time after the suspension of the Bank Acts.

Otherwise the absolute mass of the circulation has no influence upon the rate of interest, since the circulation, assuming the economy and velocity of the currency to be constant, is determined in the first place by the prices of commodities and the mass of the transactions (one of these elements generally paralysing the action of the other), and in the second place by the state of credit, whereas it does not by any means exert any reverse influence on the state of credit; and, finally, since the prices of commodities and interest have not necessarily any connection with each other.

During the Bank Restriction Act (1797–1820) there was a superfluity of currency, the rate of interest was always much higher than it became since cash payments were resumed. Later it fell rapidly with the restriction of the issue of notes and rising quotations of bills. In 1822, 1823, and 1832 the general circulation was low, and so was the rate of interest. In 1824, 1825, and 1836 the circulation was full and the rate of interest rose. In the summer of 1830 the circulation was full, the rate of interest low. Since the discoveries of gold the gold circulation of all Europe has expanded, the rate of interest risen. The rate of interest, then, does not depend upon the quantity of the circulating money.

The difference between the issue of currency and loans of capital is best shown in the real process of reproduction. We have seen, there (Volume II, Part III), in what manner the different component parts of the production are exchanged for one another. For instance, the variable capital consists substantially of the means of subsistence of the laborers, a portion of their own product. But this is paid over to them

piecemeal in money. The capitalist has to advance this, and it depends very much on the organization of the credit system, whether he can pay out the new variable capital next week with the old money, which he paid out last week. The same holds good with regard to the acts of exchange between the different component parts of the total social capital, for instance, between the articles of consumption and the means of production of articles of consumption. The money for their circulation must, as we have seen, be advanced by one or both of the exchanging parties. It remains thereupon in the circulation, but returns after the consummation of the exchange always to him who advanced it, since it had been advanced by him in excess of his actually employed industrial capital (Volume II, Chapter XX.). Under a developed credit system, when the money is concentrated in the hands of the banks, it is they, at least nominally, who advance it. This advance refers only to the money existing in circulation. It is an advance of currency, not of the capitals, which the credit system circulates.

Chapman 5062. "There may be times, when the bank notes in the hands of the public constitute a very large amount, and yet none may be had." Money exists also during a panic. But every one takes good care not to convert it into loanable capital; every one holds on to it for the purpose of meeting real payments.

5099. "The banks in the rural districts send their unemployed surplus to you and other London firms?" — "Yes." — 5100. "On the other hand, the factory districts of Lancashire and Yorkshire have bills of exchange discounted by you for business purposes?" — "Yes." — 5101. "So that in this way the superfluous money of a certain district is utilised for the requirements of another district?" — "Quite right."

Chapman says that the custom of the banks to invest their surplus money-capital for a short time in consols and treasury notes has decreased considerably of late, since the custom has been introduced to loan this money at call, reclaimable from day to day. For his own person he considers the purchase

of such papers as very impracticable for his business. He prefers to invest his surplus money-capital in good bills of exchange, a part of which becomes due every day, so that he can always be sure of knowing how much ready money he can count on from day to day. [5001 to 5005.]

Even the growth of exports assumes more and more for every country, but particularly for the country granting the credit, the aspect of an increasing demand on the inland money-market, which is not felt, however, until the time of stringency. In times of increasing exports the manufacturers usually draw bills of exchange of long duration on the export merchant who receives consignments of British goods. (5126.) — 5127. "It is not frequently the case, that an agreement exists, to renew these bills from time to time?" — [Chapman:] "This is a matter which they keep secret; we should not admit any such bills. . . . It may surely take place, but I cannot say anything about this." [The innocent Chapman.] 5123. "When a great increase takes place in the exports, such as that of last year which alone amounted to 20 million pounds sterling, does not that in itself lead to a large demand for capital in order to discount bills representing these exports?" — "Undoubtedly." — 5130. "Since England as a rule gives credit to foreign countries for all its exports, would not that imply the absorption of a corresponding additional capital for the time it lasts?" — "England gives an enormous credit; but in return it takes credit for its raw materials. Drafts as are made out against us by America always for sixty days, and by other countries for ninety days. On the other hand we give credit; when sending goods to Germany, we give two or three months."

Wilson asks Chapman (5131), whether bills on England are not drawn simultaneously with the loading of these raw materials and colonial goods destined for importation, and whether these bills do not arrive together with the bills of lading. Chapman thinks so, but does not know anything about these "commercial" transactions, and suggests that more expert men be asked.— In the export to America, says Chapman, the "commodities are symbolised in transit"; this

gibberish signifies that the English export merchant draws against his goods on one of the great American banking firms in London by means of a bill of exchange running for four months, and this firm receives collateral from America.

5136. "Are not negotiations with far distant countries carried on by the merchant, who waits for his capital until the goods are sold?" — "There may be some firms of great private wealth, who are able to invest their own capital without taking advances on goods; but these goods are mainly transformed into advances by the endorsement of well known firms.— 5137. "These firms are established in . . . London, Liverpool, and elsewhere." — 5138. "It makes no difference, then, whether the manufacturer has to give up his own money, or whether he gets some merchant in London or Liverpool to advance it; it always remains an advance made in England?" — "Quite right. The manufacturer has to do with this only in a few cases" [but in 1847 in almost every case]. "For instance, a dealer in manufactured goods, in Manchester, buys commodities and ships them through a responsible firm in London; as soon as the London firm has convinced itself, that everything has been packed as per agreement, he draws a bill running for six months on this London firm against these commodities bound for India, China, or some other country; then the banking world comes in and discounts this bill for him; so that about the time, when he has to pay for these commodities. . . ."— 5139. "But even if this dealer now has the money, the banker had to advance it to him first?" — "*The banker has the bill of exchange; the banker has bought the bill;* he utilises his banking capital in this form, that is in the discounting of commercial bills." [Hence even Chapman does not regard the discounting of bills as an advance of money, but as a purchase of commodities.— F. E.] — 5140. "But still this constitutes always a part of the demands on the money-market in London?" — "Undoubtedly; this is the essential occupation of the money-market and of the Bank of England. The Bank of England is just as glad to get these bills as we, it knows that they are a good investment." — 5141. "In this way, in

proportion as the export business grows, the demand in the money-market grows likewise?" — "In proportion as the prosperity of the country grows, we" [the Chapmans] "partake in it." — 5142. "If, then, the various fields of investment of capital expand suddenly, the natural consequence is a rise of the rate of interest?" — "There is no doubt of it."

In 5143 Chapman cannot "quite understand, that with our large exports we had so much use for gold."

In 5144 the venerable Wilson asks: "Cannot it be that we are giving more credit on our exports than we are taking on our imports?"—"For myself, I should doubt this point. If any one gets accepts on his Manchester goods shipped to India, you cannot accept for less than ten months. We had, and this is quite certain, to pay America for its cotton some time before India paid us; but what effect this has, to analyse that is a very fine point." — 5145. "When we, as we did last year, had an increase in the exports of manufactured goods to the amount of 20 million pounds sterling, we must have had before that a very considerable increase in the imports of raw materials" [and even in this way overexports are identical with overimports, and overproduction with overcommerce] "in order to produce this increased quantity of goods?" — "Undoubtedly; we must have had a very considerable balance to pay; that is, the balance must have been against us at the time, but in the long run the quotations of bills of exchange with America are in our favor, and we have received for some time large shipments of precious metals from America."

5148. Wilson asks the arch usurer Chapman, whether he does not regard his high interest as a sign of great prosperity and a high rate of profit. Chapman, evidently surprised at the naïveté of this sycophant, assents to this, of course, but is sincere enough to add the following clause: "There are some, who cannot help themselves in any other way; they have obligations to fulfill, and they must fulfill them, whether it be profitable or not; but if it lasts" [the high rate of interest] "it would indicate prosperity." — Both of them

forget that a high rate of interest may also indicate that, as it did in 1857, the roving knights of credit are infesting the country, and that these gentlemen can afford to pay a high interest, because they pay it out of other people's pockets (whereby they take part in the fixing of the rate of interest for all others) and meanwhile live in grand style on anticipated profits. At the same time this may indeed result in a very profitable business for manufacturers and others. The returns become wholly deceptive by the loan system. This explains also the following statements, which require no explanation so far as the Bank of England is concerned, because it discounts at a lower rate than others when the rate of interest is high.

5156. "I may well say," says Chapman, "that the amounts of our discounts are at their maximum at the present, when we had a high rate of interest for such a long time." [Chapman said this on July 21, 1857, a few months before the crash.] — 5157. "In 1852" [when the rate of interest was low] "they were not so high by far." For the business was indeed a great deal sounder then.

5159. "If the market were overflowing with money . . . and the banking discount low, we should have a decrease of bills of exchange. . . . In 1852 we were in an entirely different phase. The exports and imports of the country were then nothing as compared to the present." — 5161. "Under this high rate of discount our discounting business is as high as in 1854." [When the rate of interest was from 5 to 5½%.]

Very amusing is that part of the testimony of Chapman, in which he shows that his class regard the money of the public indeed as their property and pretend to have a right to having the bills discounted by them always converted. The ingenuousness of the questions and answers is great. It becomes the duty of legislation to make the bills accepted by large firms always convertible: to take pains that the Bank of England should under all circumstances continue to give discount to the bill brokers. And yet three of these bill

brokers failed in 1857 for about 8 millions, while their own capital was infinitesimal compared to their debts.— 5177. "Do you mean to say by this that in your opinion they" [that is bills accepted by the Barings or Loyds] "should be convertible by compulsion, in the way that a note of the Bank of England is now convertible into gold by compulsion?" — "I am of the opinion, that it would be a very lamentable thing, if it were not discountable; a very extraordinary situation, that a man would have to suspend payment, because he holds accepts by Smith, Payne & Co., to Jones, Loyd & Co., and cannot discount them." — 5178. "Is not an accept of the Barings an obligation, to pay a certain amount of money when the bill becomes due?" — "That is quite right; but Messrs. Baring, if they undertake such an obligation, like every merchant who accepts such an obligation, do not dream in the least that they shall have to pay in Sovereigns; they figure on paying in the Clearing House." — 5180. "Do you mean, then, that a sort of machinery should be thought out, by means of which the public would be empowered to receive money before the bill becomes due, by having somebody else discount it?" — "No, not by the accepting party; but if you mean to say that we shall not have the possibility to have commercial bills discounted, then we must change the whole constitution of things." — 5182. "You believe, then, that it" [a commercial bill] "should be convertible into money, exactly like a note of the Bank of England must be convertible into gold?" —"Very decidedly, under certain circumstances." — 5184. "You believe, then, that the institutions of currency should be arranged in such a way that a commercial bill of undoubted solidity should at all times be convertible in money like a bank note?" — "That I believe." — 5185. "You do not go so far as to say either the Bank of England or anybody else should be compelled by law to convert it?" — "I go indeed so far as to say that if we make a law for the regulation of the currency, we should take steps to prevent the possibility of inland commercial bills becoming inconvertible, to the extent that such

bills are undoubtedly solid and legitimate."— This is the convertibility of the commercial bill against the convertibility of bank notes.

5189. "The money dealers of the country represent in fact only the public." — So did Mr. Chapman later before the jury in the Davison case. See the *Great City Frauds.*

5196. "During the quarterly terms" [when the dividends are paid] "it is . . . absolutely necessary, that we should turn to the Bank of England. If you take 6 or 7 millions out of the revenue of the state in anticipation of the dividends, somebody must be there, who will in the meantime advance this amount." — [In this case it is a question of a supply of money, not of capital or loan capital.]

5169. "Every one familiar with our commercial world must know that if we are in such circumstances that treasury notes become unsalable, that obligations of the East Indian Company are completely useless, that the best commercial bills cannot be discounted, a great apprehension must reign among those whose business places them in a position where they must make payment immediately on simple demand in customary currency, and this is the case with all bankers. The effect of this is then that everybody doubles his reserves. Now just look what the effect of this is in the whole country, when every country banker, of whom there are about 500, has to instruct his London correspondent to remit to him 5,000 pounds sterling in bank notes. Even if we take such a small amount as this for an average, which is quite absurd, we arrive at 2½ million pounds sterling, which are withdrawn from circulation. How are they to be replaced?"

On the other hand the private capitalists, etc., who have money do not care to let go of it at any interest, for they say, according to Chapman, 5194: "We prefer to have no interest at all rather than to be in doubt, whether we can get the money when we need it."

5173. "Our system is this: We have 300 million pounds sterling worth of obligations, the payment of which in coin of the realm may be demanded at any moment; and this coin of the realm, if we use all of it for this purpose,

amounts to 23 million pounds sterling, or thereabout; is not that a condition, which may throw us into convulsions at any moment?" Hence we have in times of crisis the sudden change of the credit system into a monetary system.

Aside from the panic in the home market during crises, there can be any mention of the quantity of money only in so far as it concerns metal, which is the world money. And this is precisely what Chapman excludes; he speaks only of 23 millions in bank notes.

The same Chapman, 5218. "The original cause of the disturbance of the money-market" [in April and later in October] "was undoubtedly in the quantity of money required for the regulation of the quotations of bills of exchange, in consequence of the extraordinary imports of the year."

In the first place, this reserve of world market money had then been reduced to its minimum. In the second place it served at the same time as a security for the convertibility of the credit money, the bank notes. It combined in this way two quite different functions, which, however, proceed both of them from the nature of money, since real money is always world money, and the credit money always rests upon the world money.

In 1847, without the suspension of the Bank Acts of 1844, "the Clearing Houses could not have carried on their business." (5221.)

That Chapman nevertheless had a suspicion of the coming crisis, is shown by the following statement: 5236. "There are certain conditions of the money-market (and the present one is not far removed from that), in which money is very difficult, and one has to have recourse to a bank."

5239. "As for the amounts taken by us out of the bank on Friday, Saturday and Monday, October 19, 1847, we should have been only too grateful on the following Wednesday, if we could have gotten back the bills of exchange; the money returned to us immediately after the panic was over." — On Tuesday, October 23, the Bank Acts were suspended, and this broke the crisis.

Chapman believes (5274) that the bills running si-

multaneously on London amounted to 100 or 120 million pounds sterling. This did not include the local bills on provincial places.

5287. "While in October, 1856, the amount of the notes in the hands of the public rose to 21,155,000 pounds sterling, there was nevertheless a very extraordinary difficulty in raising money; although the public had so much in its hands, we could not get our fingers on it." — This was due to the fear, caused by the panic, in which the Eastern Bank found itself for a time (March 1856).

5190–92. As soon as the panic is over, "all bankers who make their profits out of interest begin at once to employ their money."

5302. Chapman does not explain the unrest going with the decrease of the bank reserve out of the apprehension concerning the deposits, but attributes it to the fact that all those, who suddenly may be compelled to pay large sums of money, know very well that they may be driven to seek their last refuge in the bank, when a panic seizes the money-market; and "when the bank has a very small reserve, it is not glad to receive us; on the contrary."

By the way it is nice to observe the way in which the reserve dwindles away as a really existing magnitude. The bankers keep a minimum for their current business either in their own hands or with the Bank of England. The bill brokers hold the "loose bank money of the country" without any reserve. And the Bank of England has nothing to offset its debt for deposits but the reserves of bankers and others, together with some public deposits, etc., which it permits to be drained to its very lowest level, for instance to 2 millions. Aside from these 2 millions of paper, then, this whole swindle has no other reserve but the metal reserve in times of crisis (and this reduces the reserve, because the notes, which come in to replace outgoing metal, must be annulled), and thus every reduction of this reserve by the expenditure of gold increases the crisis.

5306. "If no money were available to settle the balances in the Clearing House, I do not see that we could do anything

else but to come together and make our payments in first drafts, checks on the Treasury Department, Smith, Payne & Co., etc." — 5307. "That is to say, if the government should fail to supply you with means of circulation, you would create one for yourself?" — "What are we going to do? The public comes in and takes the circulating medium out of our hands; it does not exist." — 5308. "Then you would simply do in London what is done in Manchester every day?" — "Yes."

Particularly good is the reply of Chapman to a question asked by Cayley, a Birmingham man of the Attwood school, with regard to Overstone's conception of capital. 5315. "It has been stated before this Committee, that it is not money, but capital, which is demanded in a panic like that of 1847; what is your opinion on this?" — "I do not understand you; we deal only in money; I don't understand what you mean." — 5316. "If you mean thereby" [namely by commercial capital] "the mass of money belonging to himself, which a man has in his business, if you call that capital, it forms generally a very small part of the money, with which he operates in his transactions by means of the credit given to him by the public" — that is, by the intervention of the Chapmans.

5339. "Is it from lack of wealth that we suspend our cash payments? — By no means. . . . We have no lack of wealth, but we move under a most artificial system, and when we have an immense superincumbent demand for our medium of circulation, it may lead to conditions, which prevent us from securing this medium of circulation. Should the entire commercial industry of the country be laid lame on this account? Should we close all avenues of employment? — 5338. "Should the question be asked, what we want to maintain, whether the cash payments or the industry of the country, I know which of the two I should drop."

Concerning the hoarding of bank notes "with the intention of intensifying the panic, or drawing advantages from its results" [5358] he says that this may be done easily. Three large banks would be sufficient. 5383. "Should it not be known to you, a man familiar with the great firms

of our metropolis, that capitalists utilise these crises to make enormous profits out of the ruin of those, who fall victims?" — "There can be no doubt of it." — And we may well believe Mr. Chapman on this score, although he finally broke his own neck in the attempt of making "enormous profits out of the ruin of his victims." For while his associate Gurney says "Every change in business is advantageous for him who is posted," Chapman says: "The one portion of society knows nothing about the other; there is, for instance, the manufacturer, who exports to the continent, or who imports his raw material, he knows nothing of the other, who deals in gold bullion." (5046.) — And thus it happened, that one fine day Gurney and Chapman themselves "were not posted" and went into an ill-famed bankruptcy.

We have seen previously, that the issuing of notes does not signify an advance of capital in all cases. The following testimony of Tooke before the C. D. Committee of Lords, 1848, proves merely that an advance of capital, even if accomplished by the bank by an issue of new notes, does not signify straightway an increase in the number of circulating notes.

3099. "Do you believe, that the Bank of England could extend its loans considerably, without bringing about an increased issue of notes?" — "There are abundant facts at hand to prove this. One of the most striking examples was in 1835, when the Bank made use of the West Indian deposits and of the loan from the East Indian Company to increase its loans to the public; at the same time the amount of notes in the hands of the public actually decreased somewhat. . . . Something similar to this is noticeable in 1847 at the time of the paying of the railroad deposits in the Bank; the securities [in discount and deposits] rose to about 30 millions, while no appreciable effect took place on the amount of notes in the hands of the public."

Aside from the bank notes the wholesale trade has another medium of circulation, which is far more valuable to it, namely the bills of exchange. Mr. Chapman showed us, how

essential it is for a regular flow of business that good bills of exchange should be taken in payment everywhere and under all conditions. If bills of exchange are no longer good, what in the world is to be done? How do these two media of circulation stand towards one another?

Gilbart says on this score: "The restriction of the amount of the circulation of notes increases regularly the amount of the circulation of bills of exchange. The bills are of two kinds — commercial bills and banker's bills — if money becomes scarce, then the money lenders say: "You draw on us and we will endorse," and when a provincial banker discounts a bill for some customer, he does not give him cash money, but his own draft for 21 days on his London agent. These bills serve as a medium of circulation." (G. W. Gilbart, *An Inquiry into the Causes of the Pressure*, etc., p. 31.)

This is corroborated in a somewhat modified form by Newmarch, B. A. 1857, No. 1426: "There is no connection between the fluctuations in the amount of the circulating bills and those of the circulating bank notes . . . the only rather uniform result is . . . that as soon as a stringency in the money-market occurs, such as is indicated by a raising of the rate of discount, the volume of the circulation of bills is considerably increased and vice versa."

However, the bills of exchange written in such times are by no means only the short bank bills mentioned by Gilbart. On the contrary, they are largely bills of accommodation, which represent no real business at all, or at least only transactions made for the purpose of drawing bills of exchange on them; we have given sufficient illustrations of both. Hence the "*Economist*" (Wilson) says in comparing the security of such bills with that of bank notes: "Bank notes payable on presentation can never stay out in excess, because the excess would always return to the bank for exchange, while two-months drafts may be issued in great superabundance, as there is no means of controlling their issue until they become due, when they may have been replaced by others. That a nation should admit the security of the circulation of bills

payable at some future date, but raise doubts against a circulation of paper money payable on presentation, is completely unintelligible to us." (*Economist,* 1847, p. 572.)

The quantity of the circulating bills is, therefore, like that of the bank notes, merely determined by the requirements of commerce; in ordinary times the circulation of bills running in the fifties together with about 39 millions in bank notes amounted to about 300 millions, and from 100 to 120 millions of this were made out on London alone.

The volume of the circulation of bills has no influence on the circulation of notes, and is influenced by the latter only in times of stringency of money, when the quantity of bills increases and their quality deteriorates. Finally, at the time of a crisis, the circulation of bills fails completely; no man can make use of a promise to pay, since every one wants to accept only cash payment; only the bank note retains, at least so far in England, its ability to circulate, because the nation with its total wealth backs up the Bank of England.

We have seen that even Mr. Chapman, though himself a magnate of the money-market in 1847, complained bitterly, that there were a few large money-capitalists in London strong enough to carry disorder into the whole money-market at any given moment and thereby to bleed the smaller money dealers. There were several large sharks of this kind, he said, who could considerably intensify a stringency, by selling one or two millions worth of consols and thereby taking an equal amount of bank notes (and at the same time of available loan capital) out of the market. To transform a stringency into a panic by the same maneuver, the joint action of three large firms would be sufficient.

The greatest capital power in London is, of course, the Bank of England, which, however, is prevented by its position as a semi-government institution from making too brutal a use of its power. Nevertheless it also knows enough about ways and means of making money, particularly since the Bank Acts of 1844.

The Bank of England has a capital of 14,553,000 pounds sterling, and commands besides about 3 million pounds sterling of a "Remainder," that is, undistributed profits, and furthermore all moneys collected by the government for taxes, etc., which must be deposited there until they are needed. Add to this the amount of other deposits, about 30 million pounds sterling in ordinary times, and the bank notes issued without a reserve, and we shall find that Newmarch made a rather conservative estimate, when he said (B. A. 1857, No. 1889): "I have convinced myself, that the total amount of the funds employed continually in the [London] money-market may be estimated at about 120 million pounds sterling; and of these 120 millions the Bank of England commands a very considerable portion, about 15 to 20%."

So far as the Bank issues notes, which are not covered by the metal reserve in its vaults, it creates symbols of value, that form not only currency, but also additional, even if fictitious, capital for it to the nominal amount of these unprotected notes. And this additional capital yields an additional profit for it.— In B. A. 1857, Wilson asks Newmarch, No. 1563: "The circulation of a bank's own notes, that is, on an average the amount remaining in the hands of the public, forms an addition to the effective capital of that bank, does it not?"—"Assuredly."— 1564. "All profits, then, which the bank derives from this circulation, is a profit arising from credit, not from a capital actually owned by it?"—"Assuredly."

The same is true, of course, of the private banks issuing notes. In his answers Nos. 1866 to 1868 Newmarch considers two-thirds of all bank notes issued by them (the last third has to be covered by a metal reserve in these banks) as "a creation of so much capital," because hard cash is saved to this amount. The profit of the banker may not be larger than that of other capitalists, notwithstanding all this. The fact remains, however, that he draws the profit out of this national saving of hard cash. The fact that a national saving becomes a private profit does not shock the bourgeois economist in the least, since profit is under all circumstances the

appropriation of national labor. Is there anything more insane than, for instance, the Bank of England in 1797 to 1817, whose notes have credit only by the backing of the state, taking payment from the state, and from the public, in the form of interest on government loans for the power, granted to it by the state, to transform these same notes from paper into money and then to loan them to the state?

The banks have still other means of creating capital. According to the same Newmarch the provincial banks, as mentioned above, have the habit of sending their superfluous funds (that is, notes of the Bank of England) to London bill brokers, who send them discounted bills of exchange in return. With these bills the bank serves its customers, since it follows the rule not to issue the bills of exchange received from its local customers any more, in order that the business transactions of these customers may not become known in their own neighborhood. These bills received from London do not only serve for the purpose of being issued to customers, who have to make payments direct to London, unless these customers should prefer to get the bank's own draft on London; they serve also for the settlement of payments in the province, for the endorsement of the bankers secures local credit for them. In Lancashire, for instance, all the local banks' own notes and a large portion of the notes of the Bank of England, have been crowded out of the circulation by such bills. (*Ibidem,* 1568 to 1574.)

We see here, then, how the banks create credit and capital, 1) by the issue of their own notes, 2) by writing out drafts on London running as long as 21 days but paid to them in cash immediately on being written, and 3) by paying out discounted bills of exchange, which are endowed with credit primarily and essentially by endorsement through the bank, at least for the local district.

The power of the Bank of England is shown in its regulation of the market rate of interest. In times of normal business it may happen, that the Bank cannot prevent a moderate drain of gold from its metal reserve by raising the rate of dis-

count,[104] because the demand for means of payment is satisfied by the private banks, stock banks and bill brokers, who have gained considerably in capital power during the last thirty years. In that case the Bank of England must use other means. But for critical moments, the statement made by Banker Glyn (of Glyn, Mills, Currie & Co.) before the C. D. 1848–57 still holds good:— 1709. "In times of great stringency in the country the Bank of England commands the rate of interest."—"In times of extraordinary stringency . . . when the discounts of the private bankers or brokers are relatively restricted, they fall to the Bank of England, and then it has the power to fix the market rate of interest."

It is true, that the Bank of England, being a public institution under government protection, cannot exploit its power ruthlessly, in the same way that private institutes may. For this reason Hubbard says before the Banking Committee B. A. 1857, No. 2844: "Is it not true, that when the rate of discount is highest, the Bank of England gives the cheapest service, and when lowest, then the brokers are the cheapest?"—"That will always be the case, for the Bank of England never comes down as low as its competitors, and when the rate is highest, it never goes quite so high."

But nevertheless it is a serious event in business life, when the Bank of England draws the screw tighter in times of crisis, as the saying is, that is, when it raises the rate of interest, which is already above the average, still higher. "As soon as the Bank of England tightens the screw, all purchases for export into foreign countries cease . . . the exporters wait, till the depression of prices has reached its lowest

[104] In the general meeting of the stockholders of the Union Bank of London, on January 17, 1894, President Ritchie relates that the Bank of England raised the discount in 1873 from 2½% in July to 3 and 4% in August, and when it lost fully 4½ million pounds sterling in gold in spite of this, it raised the rate of interest to 5%, whereupon gold flowed back to it and the bank rate was reduced to 4% in September and 3% in October. But this bank rate was not recognized in the market. "When the bank rate was 5%, the market rate was 3½% and the rate for money 3¼%; when the bank rate fell to 4%, the rate of discount was 2⅜% and the money rate 1¾%; when the bank rate was 3%, the rate of discount was 1⅞% and the money rate a trifle lower." (*Daily News*, January 18, 1894.)— F. E.

point, and only then and not before do they buy. But when this point is reached, the quotations have once more become settled — gold ceases to be exported, before this lowest point of the depression is reached. Purchases of commodities for export may possibly bring back a part of the money sent abroad, but they come too late to prevent the drain." (G. W. Gilbart, *An Inquiry into the Causes of the Pressure on the Money Market,* London, 1840, p. 37.) —"Another effect of the regulation of the currency by means of foreign quotations on bills of exchange is that it brings about an enormous rate of interest in times of crisis." (L. c., p. 40.) —"The costs arising out of the restoration of the quotations on bills of exchange fall upon the productive industry of the country, whereas in the course of this process the profit of the Bank of England is positively increased by the fact that it continues its business with a smaller amount of precious metal." (L. c., p. 52.)

But, says friend Samuel Gurney, "These great fluctuations of the rate of interest are advantageous for the bankers and money dealers — all fluctuations in business are advantageous for him who is posted." And even though the Gurneys skim the cream off the ruthless exploitation of the precarious condition of business, whereas the Bank of England cannot do this with the same liberty, nevertheless it also makes quite nice profits — not to mention the private profits, which of their own account fall into the lap of the directors, who have an exceptional opportunity to understand the general condition of business. According to a statement made before the Lord's Committee of 1817 on the matter of the resumption of specie payments these profits of the Bank of England for the entire period from 1797 to 1817 stood as follows:

Bonuses and increased dividends	7,451,136
New stock divided among proprietors	7,276,500
Increased value of capital	14,553,000
Total	29,280,636

on a capital of 11,642,100 pounds sterling in 19 years. (D. Hardcastle, *Banks and Bankers,* 2nd edition, London, 1843,

p. 120.) If we estimate the total profits of the Bank of Ireland, which also suspended specie payments in 1797, by the same principle, we obtain the following result:

Dividends as by returns due 1821	4,736,085
Declared bonus	1,225,000
Increased assets	1,214,800
Increased value of capital	4,185,000
Total	11,360,885

on a capital of 3 million pounds sterling. (*Ibidem,* p. 163.)

Talk about centralisation! The credit system, which has its center in the so-called national banks and the great money lenders and usurers about them, is an enormous centralisation, and gives to this class of parasites a fabulous power, not only to despoil periodically the industrial capitalists, but also to interfere into actual production in a most dangerous manner — and this gang knows nothing about production and has nothing to do with it. The Acts of 1844 and 1845 are proofs of the growing power of these bandits, who are joined by the financiers and stock jobbers.

Should any one still dream that these honorable bandits exploit national and international production only in the interest of production and of the exploited themselves, he will surely be taught better by the following homily on the high moral dignity of the bankers: "The bank establishments are religious and moral institutions. How often has not the fear of being seen by the vigilant and disapproving eye of his banker deterred the young business man from seeking the society of noisy and extravagant friends? How anxious he is to stand well in the estimation of the banker, to appear always respectable! The knit brow of the banker has more influence over him than the moral preaching of his friends; does he not tremble to be suspected of being guilty of fraud or of the least false statement, for fear of causing suspicion, in consequence of which his banking accommodation might be restricted or cancelled? The advice of the banker is more important to him than that of the clergyman." (G. M. Bell, a Scotch bank director, in *The Philosophy of Joint Stock Banking,* London, 1840, pp. 46 and 47.)

CHAPTER XXXIV.

THE CURRENCY PRINCIPLE AND THE ENGLISH BANK LAWS OF 1844.

[In a former work [105] the theory of Ricardo on the value of money as related to the prices of commodities has been analysed; we can, therefore, confine ourselves here to the indispensable. According to Ricardo, the value of metallic money is determined by the labor time incorporated in it, but only so long as the quantity of money stands in the right proportion to the quantity and price of the commodities to be handled. If the quantity of the money rises above this proportion, its value falls, the prices of commodities rise; if its quantity falls below the normal proportion, then its value rises and the prices of commodities fall — assuming all other circumstances to remain unchanged. In the first case the country, in which this excess of gold exists, will export the depreciated gold and import commodities; in the second case the gold will flow to those countries, in which it is held above its value, while the depreciated commodities flow from these countries to other markets, where they can obtain normal prices. "Since gold itself may become, both as coin and bullion, a token of value of greater or smaller magnitude than its bullion value, it is self-evident that convertible bank notes in circulation have to share the same fate. Although bank notes are convertible, i. e. their real value and nominal value agree, the aggregate currency consisting of metal and of convertible notes may appreciate or depreciate according as to whether it rises or falls, for reasons already stated, above or below the level determined by the exchange-value of the commodities in circulation and the bullion value of gold. . . . This depreciation, not of paper as compared with gold, but of gold

[106] Karl Marx, *A Contribution to the Critique of Political Economy*, Berlin, 1859, pages 236 and following.

and paper together, or of the aggregate currency of a country, is one of the principal discoveries of Ricardo, which Lord Overstone and Co. pressed into their service and made a fundamental principle of Sir Robert Peel's Bank legislation of 1844 and 1845." (L. c. p. 241.)

We need not repeat here the demonstration of the incorrectness of this Ricardian theory, which is given in the same place. We are here merely interested in the way in which Ricardo's theses were elaborated by that school of bank theorists, who dictated the above named Bank Acts of Peel.

"The commercial crises of the nineteenth century, namely, the great crises of 1825 and 1836, did not result in any new developments in the Ricardian theory of money, but they did furnish new applications for it. They were no longer isolated economic phenomena, such as the depreciation of the precious metals in the sixteenth and seventeenth centuries which interested Hume, or the depreciation of paper money in the eighteenth and early nineteenth centuries which confronted Ricardo; they were the great storms of the world market in which the conflict of all the elements of the capitalist process of production discharge themselves, and whose origin and remedy were sought in the most superficial and abstract sphere of this process, the sphere of money-circulation. The theoretical assumption from which the school of economic weather prophets proceeds, comes down in the end to the illusion that Ricardo discovered the laws governing the circulation of purely metallic currency. The only thing that remained for them to do was to subject to the same laws the circulation of credit and bank note currency.

"The most general and most palpable phenomenon in commercial crises is the sudden general decline of prices following a prolonged general rise. The general decline of prices of commodities may be expressed as a rise in the relative value of money with respect to all commodities, and the general rise of prices as a decline of the relative value of money. In either expression the phenomenon is described but not explained. . . . The different wording leaves the problem as little changed as would its translation from German into

English. Ricardo's theory of money was exceedingly convenient, because it lends to a tautology the semblance of a statement of casual connection. Whence comes the periodic general fall of prices? From the periodic rise of the relative value of money. Whence the general periodic rise of prices? From the periodic decline of the relative value of money. It might have been stated with equal truth that the periodic rise and fall of prices is due to their periodic rise and fall. . . . The tautology once admitted as a statement of cause, the rest follows easily. A rise of prices of commodities is caused by a decline of the value of money and a decline of the value of money is caused, as we know from Ricardo, by a redundant currency, i. e., by a rise of the volume of currency over the level determined by its own intrinsic value and the intrinsic value of the commodities. In the same manner, the general decline of prices of commodities is explained by the rise of the value of money above its intrinsic value in consequence of an inadequate currency. Thus, prices rise and fall periodically, because there is periodically too much or too little money in circulation. Should a rise of prices happen to coincide with a contracted currency, and a fall of prices with an expanded one, it may be asserted in spite of those facts that in consequence of a contraction or expansion of the volume of commodities in the market which cannot be proved statistically, the quantity of money in circulation has, although not absolutely, yet relatively increased or declined. We have seen that according to Ricardo these universal fluctuations must take place even with a purely metallic currency, but that they balance each other through their alternations; thus, e. g., an inadequate currency causes a fall of prices, the fall of prices leads to an export of commodities abroad, this export causes again an import of gold from abroad, which, in its turn, brings about a rise of prices; the opposite movement taking place in case of a redundant currency, when commodities are imported and money is exported. But, since in spite of these universal fluctuations of prices which are in perfect accord with Ricardo's theory of metallic currency, their acute and violent form, their crisis form, belongs to the period of advanced

credit, it is perfectly clear that the issue of bank notes is not exactly regulated by the laws of metallic currency. Metallic currency has its remedy in the import and export of precious metals, which immediately enter circulation and thus, by their influx or efflux, cause the prices of commodities to fall or rise. The same effect on prices must now be exerted by banks by the artificial imitation of the laws of metallic currency. If gold is coming in from abroad it proves that the currency is inadequate, that the value of money is too high and the prices of commodities too low, and, consequently, that bank notes must be put in circulation in proportion to the newly imported gold. On the other hand, notes have to be withdrawn from circulation in proportion to the export of gold from the country. That is to say, the issue of bank notes must be regulated by the import and export of the precious metals or by the rate of exchange. Ricardo's false assumption that gold is only coin, and that therefore all imported gold swells the currency, causing prices to rise, while all exported gold reduces the currency, leading to a fall of prices, this theoretical assumption is turned into a practical experiment of putting in every case an amount of currency in circulation equal to the amount of gold in existence. Lord Overstone (the banker Jones Loyd), Colonel Torrens, Norman, Clay, Arbuthnot and a host of other writers, known in England as the adherents of the 'Currency Principle,' not only preached this doctrine, but with the aid of Sir Robert Peel succeeded in 1844 and 1845 in making it the basis of the present English and Scotch bank legislation. Its ignominious failure, theoretical as well as practical, following upon experiments on the largest national scale, can be treated only after we take up the theory of credit." (L. c. pages 255 to 259.)

The critique of this school was furnished by Thomas Tooke, James Wilson (in the "*Economist*" of 1844 to 1847) and John Fullarton. But how incompletely they themselves had seen through the nature of gold, and how unclear they were about the relation of money and capital, we have shown several times, particularly in chapter XXVIII of this volume. We quote here merely a few instances in connection with the

transactions of the Committee of the Lower House of 1857 concerning Peel's Bank Acts (B. C. 1857).— F. E.]

J. G. Hubbard, former Governor of the Bank of England, testifies:— 2400. "The effect of the gold exports . . . absolutely does not touch prices of commodities. It does, however, affect very much the prices of securities, because in proportion as the rate of interest changes, the values of the commodities impersonating this interest must necessarily be strongly affected."— He presents two tables covering the years 1834 to 1843 and 1844 to 1853, which prove that the movement of prices of fifteen of the most important commercial articles was quite independent of the export and import of gold and of the rate of interest. On the other hand they prove a close connection between the export and import of gold, which is indeed the "representative of our capital seeking investment," and the rate of interest.—"In 1847 a very large amount of American securities was transferred back to America, also Russian securities to Russia, and other continental papers to the countries from which we derived our imports of corn."

The fifteen principal articles mentioned in the following tables of Hubbard are: Cotton, cotton yarn, cotton fabrics, wool, wool cloth, flax, linen, indigo, raw iron, white sheet metal, copper, tallow, sugar, coffee, silk.

I. *From 1834–1843.*

Date	Metal Reserve of the Bank	Market Rate of Discount	Of Fifteen Principal Articles		
			Prices Rose	Prices Fell	Prices Unchanged
1834, March 1	9,104,000	2.75%	—	—	—
1835, March 1	6,274,000	3.75%	7	7	1
1836, March 1	7,918,000	3.25%	11	3	1
1837, March 1	4,079,000	5 %	5	9	1
1838, March 1	10,471,000	2.75%	4	11	—
1839, Sept. 1	2,684,000	6 %	8	5	2
1840, June 1	4,571,000	4.75%	5	9	1
1840, Dec. 1	3,642,000	5.75%	7	6	2
1841, Dec. 1	4,873,000	5 %	3	12	—
1842, Dec. 1	10,603,000	2.5 %	2	13	—
1843, June 1	11,566,000	2.25%	1	14	—

II. *From 1844–1853.*

Date	Metal Reserve of the Bank	Market Rate of Discount	Of Fifteen Principal Articles		
			Prices Rose	Prices Fell	Prices Unchanged
1844, March 1	16,162,000	2.25%	—	—	—
1845, Dec. 1	13,237,000	4.25%	11	4	—
1846, Sept. 1	16,366,000	3 %	7	8	—
1847, Sept. 1	9,140,000	6 %	6	6	3
1850, March 1	17,126,000	2.25%	5	9	1
1851, June 1	13,705,000	1.75%	2	11	2
1852, Sept. 1	21,853,000	1.75%	9	5	1
1853, Dec. 1	15,093,000	5 %	14	—	1

Hubbard remarked with reference to this: "Just as in the 10 years from 1834 to 1843, so in the years from 1844 to 1853 fluctuations in the gold of the bank were accompanied in every case by an increase or decrease of the loanable value of the money advanced at a discount; and on the other hand the changes in the prices of inland commodities showed a complete independence from the amount of the currency, as shown by the gold fluctuations of the Bank of England." (*Bank Acts Report,* 1857, II, pages 290 and 291.)

Since the demand and supply of commodities regulates their market-prices, it becomes evident here, that Overstone is wrong when he identifies the demand for loanable capital (or rather the discrepancies of its supply from demand), as expressed by the rate of discount, with the demand for actual "capital." The contention that the prices of commodities are regulated by the fluctuations in the quantity of the currency is now concealed under the phrase that the fluctuations in the rate of discount express fluctuations in the demand for actual material capital, as distinguished from money-capital. We have seen that both Norman and Overstone actually made this contention before the same Committee, and that especially the latter was compelled to take refuge in very lame subterfuges, until he was finally cornered. (Chapter XXVI.) It is indeed the old fib that changes in the quantity of gold existing in a certain country, by increasing or reducing the quantity of the medium of circulation in that country, must raise or lower the prices of commodities in this country. If gold is exported, then, according to this currency theory, the prices

of commodities must rise in the country importing this gold, and this must enhance the value of the exports of the gold exporting country on the market of the gold importing country; on the other hand, the value of the exports of the gold importing country would fall on the markets of the gold exporting country, while it would rise in the home country, which receives the gold. But in fact the reduction of the quantity of gold raises only the rate of interest, whereas an increase in the quantity of gold lowers the rate of interest; and were it not for the fact that the fluctuations of the rate of interest are taken into account in the determination of cost-prices, or in the determination of demand and supply, the prices of commodities would be wholly unaffected by them.

In the same report N. Alexander, Chief of a great Indian firm, expresses himself in the following manner on the heavy drains of silver to India and China about the middle of the fifties, partly in consequence of the Chinese Civil War, which checked the sale of English fabrics in China, and partly of the epidemic among silk worms in Europe, which reduced the output of silk in Italy and France considerably:

4337. "Is the drain toward China or India."—"They send the silver to India, and with a goodly portion of it they buy opium, all of which goes to China in order to form a fund for the purchase of silk; and the condition of the markets in India (in spite of the accumulation of silver there) makes it more profitable for the merchant to send out silver than to send fabrics or other English factory goods."—4338. "Did not a heavy drain come out of France, by which we secured the silver?"—"Yes, a very heavy one."—4344. "Instead of importing silk from France and Italy, we ship it there in large quantities, both Bengal and Chinese."

In other words, silver, the money metal of that continent, was sent to Asia instead of commodities, not because the prices of commodities had risen in the country which had produced them (England), but because prices had fallen on account of overimport in that country which received them; and this in spite of the fact that the silver was received by England from France and had to be paid partly in gold. According to the

Currency Theory prices should have fallen by such imports in England and risen in India and China.

Another illustration. Before the Lords' Committee (C. D. 1848–1857), Wylie, one of the first Liverpool merchants, testifies as follows:— 1994. "At the end of 1845 there was no better paying business and none that yielded greater profits [than cotton spinning]. The supply of cotton was large and good, workable cotton could be had at 4 d. per pound, and such cotton could be spun into good second mule twist No. 40 at about 8 d. total expense to the spinner. This yarn was sold in large quantities in September and October, 1845, and equally large contracts made for delivery at $10\frac{1}{2}$ and $11\frac{1}{2}$ d. per pound, and in some instances the spinners realised a profit which equalled the purchase price of the cotton."— 1996. "The business remained profitable until the beginning of 1846."— 2000. "On March 3, 1844, the cotton supply [672,042 bales] was more than double of what it is today [on March 7, 1848, when it was 301,070 bales], and yet the price was $1\frac{1}{4}$ d. per pound dearer." [$6\frac{1}{4}$ d. as against 5 d.] — At the same time yarn, good second mule twist No. 40, had fallen from $11\frac{1}{2}$ to 12 d. to $9\frac{1}{2}$ d. in October and $7\frac{3}{4}$ d. at the end of December, 1847; yarn was sold at the purchase price of the cotton from which it had been spun (*Ibidem,* No. 2021 and 2023). This proves the selfinterest of Overstone's wisdom to the effect that money is supposed to be "Dearer" when capital is "scarce." On March 3, 1844, the bank rate of interest stood at 3%; in October and November, 1847, it rose to 8 and 9% and was still 4% on March 7, 1848. The prices of cotton were depressed far below that price which corresponded to the condition of the supply, by the complete stopping of sales and the panic with its correspondingly high rate of interest. The consequence of this was on the one hand an enormous decrease of the imports in 1848, and on the other a decrease of production in America; consequently a new rise in cotton prices in 1849. According to Overstone the commodities were too dear, because there was too much money in the country.

2002. "The recent deterioration in the condition of the

cotton industry is not due to the lack of raw materials, since the price is lower, although the supply of raw cotton is considerably reduced." But Overstone tangles himself up in a nice confusion of the price, or value, of commodities, with the value of money, that is, the rate of interest. In his reply to question 2026, Wylie sums up his general judgment of the Currency Theory, on which Cardwell and Sir Charles Wood based in May, 1847, their contention that it would be necessary "to carry the Bank Act of 1844 out in its full scope."—"These principles seem to me to be of a nature to give to money an artificially high value and to all commodities a ruinously low value."—He says furthermore concerning the effects of this Bank Act on business in general: "Since four months' bills of exchange, which are the regular drafts of manufacturing towns on merchants and bankers for purchased commodities intended for export to the United States, could no longer be discounted except at great sacrifices, the carrying out of orders was prevented to a large degree, until after the Government Letter of October 25." [Suspension of Bank Acts], "when these four months' bills became once more discountable." (2097.)—We see, then, that the suspension of this Bank Act was felt as a relief also in the provinces.—2102. "Last October [1847] nearly all American buyers, who purchase commodities here, immediately curtailed their purchases as much as possible; and when the news of the dearth of money reached America, all new orders stopped."—2134. "Corn and sugar were special cases. The corn market was affected by the crop prospects, and sugar was affected by the enormous supplies and imports."—2163. "Of our money obligations to America . . . many were liquidated by forced sales of consigned goods, and many, I fear, were liquidated by bankruptcies here."—2196. "If I remember correctly, *as much as 70% interest was paid on our Stock Exchange in October, 1847.*"

[The crisis of 1837, with its protracted aftereffects, which were followed in 1842 by a regular aftercrisis, and the self-interested blindness of the industrials and merchants, who would not notice any overproduction to save their lives—

for such a thing was a nonsense and an impossibility according to vulgar economy — had ultimately accomplished that confusion of thought, which permitted the Currency School to put their dogma into practice on a national scale. The Bank legislation of 1844 and 1845 was passed.

The Bank Act of 1844 divides the Bank of England into an issue department for notes and a banking department. The issue department receives securities, principally government debts, to the amount of 14 millions and the entire metal treasure, which shall consist of not more than one-quarter in silver, and issues notes to the full amount of both of them. To the extent that these are not in the hands of the public, they are held in the banking department and form its ever ready reserve together with the small amount of coin required for daily use (about one million). The issue department gives to the public gold for notes and notes for gold; the remainder of the transactions with the public is carried on by the banking department. The private banks authorised in England and Wales to issue their own notes retain this privilege, but their issue of notes is fixed; if one of these banks stops issuing its own notes, then the Bank of England may raise its uncovered amount of notes by two-thirds of the deposited allowance; in this way its allowance rose by 1892 from 14 to 16½ million pounds sterling (exactly 16,450,000 pounds sterling).

For every five pounds in gold, then, which leave the bank treasury, a five pound note returns to the issue department and is destroyed; for every five sovereigns going into the treasury a new five pound note passes into circulation. In this way Overstone's ideal paper circulation, which follows strictly the laws of metallic circulation, is practically carried out, and by this means crises are forever made impossible, according to the claims of the Currency advocates.

But in reality the separation of the Bank into two independent departments robbed the management of the possibility of disposing freely of its entire available means in critical moments, so that cases might occur, in which the banking department might be confronted with a bankruptcy, while the issue department still possessed several millions in gold and

its entire 14 millions of securities untouched. And this could take place so much more easily, as there is one period in almost every crisis, when heavy exports of gold flow to foreign countries, which must be covered in the main by the metal reserve of the bank. But for every five pounds in gold, which then go to foreign countries, the circulation of the home country is deprived of one five pound note, so that the quantity of the currency is reduced precisely at a time, when the largest quantity of it is most needed. The Bank Act of 1844 thus directly challenges the commercial world to think betimes of laying up a reserve fund of bank notes on the eve of a crisis, in other words, to hasten and intensify the crisis; by this artificial intensification of the demand for money accommodation, that is for means of payment, and its simultaneous restriction of the supply, which take effect at the decisive moment, this Bank Act drives the rate of interest to a hitherto unknown hight; hence, instead of doing away with crises, the Act rather intensifies them to a point, where either the entire commercial world must go to pieces, or the Bank Act. Twice, on October 25, 1847, and on November 12, 1857, the crisis had risen to this culmination; then the government released the Bank from its limitation in the matter of issuing notes, by suspending the Act of 1844, and this sufficed in both cases to break the crisis. In 1847 the assurance sufficed, that bank notes would again be issued for first class securities, in order to bring to light the 4 to 5 millions of hoarded notes and throw them back into circulation; in 1857 the issue of notes exceeding the legal amount did not quite reach one million, and this was out for a very short time.

It may also be noted that the legislation of 1844 still shows traces of a recollection of the first twenty years of the nineteenth century, the time of the suspension of specie payments of the bank and the depreciation of notes. The fear that the notes might lose their credit is still plainly visible. But this is a very groundless fear, since already in 1825 the issue of some discovered old supply of one pound notes, which had been out of circulation, broke the crisis and proved, that even then the credit of the notes remained unshaken in times of the most

universal and strong distrust. And this is easily explained. For the entire nation backs up these symbols of value with its credit.— F. E.]

Let us now listen to a few statements on the effect of the Bank Act. John Stuart Mill believes that the Bank Act of 1844 kept down overspeculation. Happily this wise man spoke on June 12, 1857. Four months later the crisis had broken out. He literally congratulates the "bank directors and the commercial public in general" on the fact that they "understand the nature of a commercial crisis far better than formerly, and the very great injury which they inflict upon themselves and the public by promoting overspeculation." (B. C., 1857, No. 2031.)

Wise Mr. Mill thinks that, if one pound notes are issued "as loans to manufacturers and others, who pay wages . . . then the notes may get into the hands of others who spend them for purposes of consumption, and in this case the notes constitute in themselves a demand for commodities and may temporarily tend to promote a raise in prices." Mr. Mill assumes, then, that the manufacturers will pay higher wages, because they pay them in paper instead of gold? Or does he believe that when a manufacturer receives his loan in 100 pound notes and changes them for gold, then these wages would constitute less of a demand than they would when paid at the same time in one pound notes? And does he not know that, for instance, in certain mining districts wages were paid in notes of local banks, so that several laborers together received a five pound note? Does this increase the demand for them? Or will the bankers advance money to the manufacturers more easily in small than in large notes, and make the loan larger?

[This peculiar fear of one pound notes on the part of Mill would be inexplicable, if his whole work on political economy did not show his eclecticism, which recoils from no contradictions. On the one hand he agrees in many things with Tooke against Overstone, on the other hand he believes in the determination of the prices of commodities by the quantity of the existing money. He is thus by no means convinced, that, all

other circumstances remaining unchanged, a sovereign wanders into the vaults of the Bank for every one pound note issued. He fears that the quantity of the currency could be increased and thereby depreciated, that is, the prices of commodities might be enhanced. This and nothing else is concealed behind his above-mentioned apprehension.— F. E.]

Concerning the bipartition of the Bank, and the excessive precaution to safeguard the cashing of notes, Tooke expresses himself before the C. D. 1848–57 as follows:

The greater fluctuations of the rate of interest in 1847, as compared with 1837 and '39, are due merely to the separation of the Bank into two departments (3010).— " The security of the banknotes was not affected, neither in 1825, nor in 1837 nor in 1839 (3015).— The demand for gold in 1825 aimed only to fill out the vacant space created by the complete disavowal of the one pound notes of the provincial banks; this vacant space could be filled out only by gold, until the Bank of England also issued one pound notes (3022).— In November and December, 1825, not the least demand existed for gold to export (3023).

" As for a disavowal of the Bank at home and abroad, a suspension of the payment of dividends and deposits would have much more serious consequences than a suspension of payment on bank notes (3028).

3035. Would you not say that every circumstance, which would in the last instance endanger the convertibility of the bank notes, might create new and serious difficulties in a moment of commercial stringency? — " Not at all."

In the course of 1847 " an increased issue of notes might, perhaps, have contributed to replenish the gold reserve of the Bank, as it did in 1825." (3058).

Before the Committee on B. A. 1857, Newmarch testifies: 1357. " The first bad effect . . . of this separation of the two departments (of the Bank) and of the necessarily resulting bipartition of the gold reserve was that the banking business of the Bank of England, that is, that entire branch of its operations, which brought it into direct touch with the commerce of the country, was continued with only one-half of

its former reserve. In consequence of this division of the reserve it happened that, as soon as the reserve of the banking department shrank in the least, the Bank was compelled to raise its rate of discount. This reduced reserve thus caused a series of abrupt changes in the rate of discount."—"Of such changes there have been since 1844" [until June, 1857] "some 60 in number, whereas they amounted to hardly one dozen before 1844 within a similar period."

Of special interest is the testimony of Palmer, who was a director of the Bank of England since 1811 and for a while its Governor, before the Lords' Committee on C. D. 1848–57:

828. "In December, 1825, the Bank had retained only about 1,100,000 pounds sterling in gold. At that time it would have failed inevitably, if this act had existed then [meaning the Act of 1844]. In December it issued, I believe, 5 or 6 million notes in one week, and this relieved the panic of that time considerably."

825. "The first period [since July 1, 1825], when the present bank legislation would have collapsed, if the Bank had attempted to carry its hitherto initiated transactions through, was on February 28, 1837. There were then from 3,900,000 to 4,000,000 pounds sterling in the possession of the Bank, and it would have retained no more than 650,000 pounds sterling in reserve. Another period is 1839, and it lasted from July 9 to December 5."— 826. "What was the amount of the reserve in this case?"—"The reserve was minus altogether 200,000 pounds sterling on September 5. On November 5, it rose to about 1 or 1½ millions."— 830. "The Act of 1844 would have prevented the Bank from assisting the American business in 1837."—"Three of the principal American firms failed. . . . Nearly every firm in the American business was ruled out of credit, and if the Bank had not come to the rescue, I do not believe that more than one or two firms could have maintained themselves."— 836. "The panic of 1837 is not to be compared with that of 1847. That of 1837 confined itself mainly to the American business."— 838. (At the beginning of June the management of the Bank discussed the question, how to remedy the panic.)

"Whereupon some of the gentlemen defended the view . . . that the correct principle would be to raise the rate of interest, so that the prices of commodities would fall; in brief, to make money dear and commodities cheap, by which the foreign payment would be accomplished."— 906. "The introduction of an artificial limitation of the powers of the Bank by the Act of 1844, in place of the old and natural limit of its powers, that is, the actual amount of its metal supply, makes business artificially difficult and thus effects prices in a way which was quite unnecessary without this Act."— 968. "Under the effect of the Act of 1844 the metal reserve of the Bank, under ordinary circumstances, cannot be reduced materially below 9½ millions. This would create a pressure on prices and credit, which would bring about such a change in the foreign exchange rates, that the gold imports would rise and increase the amount of gold in the issue department."— 996.

"Under the present limitation you [the Bank] have not command of silver which is required in times when silver is needed in order to affect foreign rates."— 999. "What was the purpose of the rule limiting the silver supply of the Bank to one-fifth of its metal reserve?"—"I cannot answer this question!"

The purpose was to make money dearer; so was, aside from the Currency Theory, the separation of the two bank departments and the compulsion for Scotch and Irish banks to hold gold in reserve for the issue of notes beyond a certain amount. This brought about a decentralisation of the national metal supply, which rendered this supply less able to correct unfavorable bill rates. All these rules aim at a raise of the rate of interest: That the Bank of England shall not issue notes beyond 14 millions except against its gold reserve; that the banking department shall be managed like an ordinary bank, pressing the rate of interest down when money is plentiful and driving it up when money is scarce; the limitation of the silver supply, the principal means of rectifying the rates of bills on the continent and in Asia! the rules concerning the Scotch and Irish banks, who never need any money for export and yet must keep it now under the pretence of an actually imag-

inary convertibility of their notes. The fact is that the Act of 1844 caused for the first time in 1857 a run on the Scotch banks for gold. Nor did the new bank legislation make any distinction between a drain of gold toward foreign countries and a drain to inland markets, although their effects are evidently different. Hence the continual great fluctuations of the market rate of interest. With reference to silver Palmer says twice, No. 992 and 994, that the Bank can buy silver for notes only when the rates on bills are favorable to England, so that silver is superfluous; for (1003) "the only purpose for which a considerable portion of the metal reserve may be kept in silver is that of facilitating foreign payments during the time when the rates on bills are against England."— 1008. "Silver is a commodity which, being money in all the rest of the whole world, is for this reason the most fitting commodity . . . For this purpose" [payments abroad]. "Only the United States have taken exclusively gold during recent times."

In his opinion the Bank would not have to raise the rate of interest above its old level of 5% in times of stringency, so long as no unfavorable bill rates draw the gold to foreign countries. Were it not for the Act of 1844, the Bank would then be able to discount all first class bills presented to it without any difficulty. [1018 to 20.] But with the Act of 1844, and in the condition, in which the Bank was in October, 1847, "there was no rate of interest which the Bank could ask from creditable firms, which they would not have paid willingly in order to continue their payments." And this high rate of interest was precisely the purpose of the Act.

1029. "I must make a great distinction between the effect of the rate of interest on the foreign demand [for precious metal] and a raise of the rate of interest for the purpose of stemming a rush on the bank during a period of lacking credit inland."— 1023. "Before the act of 1844, when the rates were in favor of England, and unrest, yea, a positive panic, reigned in the country, no limit was set to the issue of notes, by which alone this condition of stringency could be relieved."

So speaks a man who had sat 39 years in the management

of the Bank of England. Let us now hear a private banker, Twells who had been an associate of Spooner, Attwoods & Co. since 1801. He is the only one among all the witnesses before the B. C. 1857, who gives us an insight into the actual condition of the country and who sees the approach of the crisis. For the rest he is a sort of Little-Shilling-Man from Birmingham, for his associates, the brothers Attwood, are the founders of this school. (See *A Contribution to the Critique of Political Economy*, p. 100.) He testifies: 4488. "How do you think the Act of 1844 has operated?"—"Should I answer you as a banker, I would say that it has operated splendidly, for it has furnished to the bankers and [money-] capitalists of all sorts a rich harvest. But it has operated very badly for the honest and thrifty business man, who needs steadiness in discount, in order that he may make his arrangements with confidence. . . . It has made the lending of money a very profitable business."—4489. The Bank Act "Enables the London Stock Bank to pay to its stockholders 20 to 22%?"—"One of them paid recently 18%, and I believe another 20%: they have good grounds for standing determinedly by the Bank Act."—4490. "Small business men and respectable merchants, who have no large capital . . . it pinches them hard. . . . The only means which I have of learning this is such a surprising quantity of their drafts, which are not paid. These drafts are always small, about 20 to 100 pounds sterling, many of them are not paid and go back for lack of payment to all parts of the country, and this is always a sign of stringency among — the small dealers."—4494. He declares that the business is not profitable now. His following remarks are important, because he saw the latent existence of the crisis, when none of the others suspected it as yet.

4494. "The prices in Mincing Lane keep up pretty well so far, but nothing is sold, one cannot sell anything at any price; one maintains himself at the nominal price."—4495 He relates the following case: A Frenchman sends to a broker in Mincing Lane commodities for 3,000 pounds sterling for sale at a certain price. The broker cannot make the price,

the Frenchman cannot sell below his price. The commodities remain unsold, but the Frenchman needs money. The broker therefore makes him an advance of 1,000 pounds sterling in such a way, that the Frenchman draws a check of 1,000 pounds sterling for three months on the broker with his commodities for a security. At the end of the three months the bill becomes due, but the commodities are still unsold. The broker must then pay for the bill, and although he has security for 3,000 pounds sterling, he cannot raise them and gets into difficulties. In this way one drags down another.— 4496. "As for the heavy exports — when the business is depressed in the home market, it calls forth necessarily a heavy export." — 4497. "Do you believe that the home consumption has decreased?"—"Very considerably — quite enormously — the small dealers are the best authority in this."— 4498. "Nevertheless the imports are very large; does not that indicate a strong consumption?"—"Yes, if you can sell; but many warehouses are full of these things; in the example, which I have just related, 3,000 pounds sterling worth of commodities have been imported, which are unsalable."

4514. "If money is dear, would you say that capital is then cheap?"— "Yes, sir."— This man, then, is by no means of Overstone's opinion that a high rate of interest is the same as dear capital.

The following shows how the business is carried on now. — 4516. . . . "Others go in very heavily, do an enormous business in exports and imports, far beyond the limit to which their capital entitles them; there cannot be the least doubt about this. These people may be lucky in this; they may make great fortunes by some lucky stroke and pay up everything. This is in a large measure the system, by which nowadays a considerable portion of the business is carried on. Such people are willing to lose 20, 30 and 40% on a shipment; the next transaction may bring it back to them. If they fail in one thing after another, they are gone; and that is precisely the case which we have seen often enough of late; business firms have failed, without leaving one shilling's worth of assets."

4791. "The low rate of interest [during the last ten years] militates indeed against the bankers, but without laying the business books before you, I should have much difficulty in explaining to you, how much higher the profit [his own] is now than formerly. When the rate of interest is low, in consequence of excessive issues of notes, we have considerable deposits; when the rate of interest is high, it brings us direct profits."— 4794. "When money may be had at a moderate rate of interest, we have more demand for it; we loan more; it works this way [for us, the bankers]. When it rises, we get more for it than when it is cheap; we get more than we ought to have."

We have seen that the credit of the notes of the Bank of England is considered impregnable by all experts. Nevertheless the Bank Act absolutely ties up nine to ten millions in gold for the convertibility of these notes. The sacredness and inviolability of this reserve is here carried much farther than among the hoard makers of olden times. Mr. Brown (Liverpool) testifies, C. D. 1848–57, 2311: "Concerning the good derived at that time from this money [the metal reserve in the issue department], it might just as well have been thrown into the sea; for not the least bit of it could be used, without breaking the Act of Parliament."

The building contractor, E. Capps, the same one who has been mentioned once before, and whose testimony is borrowed also to illustrate the modern building system in London (Volume II, chapter XII, pages 266 and 267), sums up his opinion of the Bank Act of 1844 in the following way (B. A. 1857): 5508. "You are, then, in general of the opinion that the present system [of bank legislation] is a very apt institution for bringing the profits of industry periodically into the money bag of the usurer?"—"That is my opinion. I know that it has worked that way in the building business."

We have already mentioned that the Scotch banks were pushed by the Bank Act of 1845 into a system approaching the English. They were placed under the obligation to hold gold in reserve for their issue of notes beyond a limit fixed for each bank. What the effect of this was, may be seen from

the following testimony before the Bank Committee, 1857.

Kennedy, Director of a Scotch bank: 3375. "Was there anything in Scotland that might be called a circulation of gold, before the introduction of the Act of 1845?"—"Nothing of the kind."—3376. "Has an additional circulation of gold ensued since then?"—"Not in the least; the people dislike gold."—3450. "The sum of about 900,000 pounds sterling in gold, which the Scotch banks must keep since 1845, are in my opinion merely injurious and "absorb unprofitably an equal portion of the capital of Scotland."

Furthermore Anderson, Director of the Union Bank of Scotland: 3558. "The only heavy demand for gold made on the part of the Scotch banks upon the Bank of England occurred on account of the foreign rates of exchange?"—"That is so; and this demand is not reduced by the fact that we keep gold in Edinburgh."—3590. "So long as we deposited the same amount of securities in the Bank of England" [or in the private banks of England] "we have the same power as before to create a drain of gold from the Bank of England."

Finally we quote an article from the "*Economist*" (Wilson): "The Scotch banks keep unemployed amounts of cash with their London agents; these keep them in the Bank of England. This gives to the Scotch banks, within the limits of these amounts, command over the metal reserve of the bank, and here it is always in the place where it is needed, when foreign payments are to be made."—This system was disturbed by the Act of 1845: "In consequence of the act of 1845 for Scotland a strong outpour of gold coin from the Bank of England has taken place lately, in order to meet a mere possible demand in Scotland, which would probably never occur.—Since that time a considerable amount finds itself tied up regularly in Scotland, and another considerable amount is continually under way between London and Scotland. If a time comes when a Scotch banker expects an increased demand for his notes, a box of gold is sent on from London; if this time is past, the same box goes back to London, generally without having been opened." (*Economist*, October 23, 1847.)

[And what does the father of the Bank Act, Banker Samuel Jones Loyd, alias Lord Overstone, say to all this?

He repeated even in 1848 before the Lords' Committee on C. D. that "a money stringency and a high rate of interest, caused by a lack of sufficient capital, cannot be relieved by an increased issue of bank notes" (1514), in spite of the fact that the mere permission to increase the issue of notes, given by the government letter of October 25, 1847, had sufficed to break the point of the crisis.

He sticks to the idea that "the high rate of interest and the depressed condition of the manufacturing industry was the necessary consequence of the reduction of the material capital available for industrial and commercial purposes" (1604). And yet the depressed condition of the manufacturing industry had for months consisted in the fact that the material commodity-capital was filling the warehouses to overflowing and was almost unsalable; so that for this reason the material productive capital was wholly or partly fallow, in order not to produce still more unsalable commodity-capital.

And before the Bank Committee of 1857 he said: By a strict and prompt adherence to the principles of the Act of 1844 everything has passed off with regularity and ease, the money system is secure and unshaken, the prosperity of the country is undisputed, the public confidence in the Act of 1844 is daily gaining in strength. If this Committee desires still further practical proofs of the soundness of the principles on which this act rests, and of the beneficent consequences which it has guaranteed, then the true and sufficient answer is this: Look about you; consider the present condition of the business of this country; consider the satisfaction of the people; consider the wealth and prosperity of all classes of society; and then, after you have seen all this, this Committee will be able to decide, whether it will prevent a continuation of an Act, under which such success has been obtained." (B. C. 1857, No. 4189.)

To this song of praise, which Overstone emitted before the Committee on July 14, replied the song of defiance on November 12, of the same year, in the shape of the letter to the

management of the Bank, in which the government suspended the miracle-working law of 1844, in order to save what could still be saved.— F. E.]

CHAPTER XXXV.

PRECIOUS METALS AND RATES OF EXCHANGE.

I. *The Movements of the Gold Reserve.*

Concerning the hoarding of notes in times of stringency we remark, that in such cases the hoarding of precious metals is repeated, which used to be resorted to in restless times during the most primitive conditions of society. The Act of 1844 is interesting in its effects for the reason that it seeks to transform all the precious metals existing in a certain country into currency; it seeks to identify a discharge of gold with a contraction of the currency and an incoming flood of gold with an expansion of the currency. And so it happened that the experiment proved the contrary. With one sole exception, which we shall mention immediately, the quantity of the circulating notes of the Bank of England never reached the maximum, since 1844, which it was authorized to issue. And the crisis of 1857 proved, on the other hand, that this maximum does not suffice under certain circumstances. From November 13, to 30, 1857, a daily average of 488,830 pounds sterling circulated above this maximum (B. A. 1858, p. XI). The legal maximum was at that time 14,475,000 pounds sterling plus the amount of the metal reserve in the vaults of the bank.

Concerning the outgoing and incoming tide of precious metals the following remarks are made:

1) A distinction should be made between the back and forth movements of the metal within the districts which do not produce any gold and silver, and on the other hand, between the flow of gold and silver from their sources of pro-

duction to the different other countries and the distribution of this additional metal among these other countries.

Before the gold mines of Russia, California and Australia exerted their influence, the supply since the beginning of the nineteenth century sufficed only to replace the wornout coins, to satisfy the demand for articles of luxury, and to promote the exports of silver to Asia.

However, the silver exports of Asia increased extraordinarily since that time, owing to the Asiatic trade with America and Europe. The silver exported from Europe was largely replaced by the additional supply of gold. In the second place, a portion of the newly imported gold was absorbed by the internal money-circulation. It is estimated that up to 1857 about 30 millions in gold were added to the internal circulation of England.[106] Furthermore, the average volume of the metal reserves in all central banks of Europe and America increased since 1844. The increase of the inland money circulation also carried with it the circumstance, that in the period of stagnation following upon the panic the bank reserves grew more rapidly than before in consequence of the larger quantity of gold coins thrown out of inland circulation and held in a state of rest. Finally the consumption of precious metals for articles of luxury increased since the discovery of new gold deposits in consequence of the growing wealth.

2) Between the countries that do not produce any gold and silver, precious metals flow back and forth; the same country continually imports some, and just as continually exports

[106] What effect this had on the money market, is shown by the following testimony of Newmarch: 1509. "Toward the close of 1853 considerable apprehension was felt by the public; in September the Bank of England raised its discount three times in succession . . . in the first days of October . . . a considerable degree of anxiety and alarm showed itself among the public. These apprehensions and this restlessness were largely alleviated before the end of November, and were almost wholly removed by the arrival of five millions in precious metal from Australia. The same thing was repeated in the fall of 1854, when almost six millions in precious metals arrived in October and November. And in the fall of 1855, a time of excitement and restlessness, the same thing was repeated on the arrival of about eight millions in precious metals during the months of September, October and November. At the end of 1856 we find the same thing takes place. In short, I could very well appeal to the experience of nearly every member of this committee as to whether we have not become accustomed to see a natural and complete remedy for a financial stringency in the arrival of a gold ship."

some. It is only the predominance of this movement in one direction or the other which decides whether there is in the last instance a drain or an addition, since the merely oscillating and frequently parallel movements largely neutralise one another. But for this reason, so far as this result is concerned, the continuity and the mainly parallel course of both movements is overlooked. It is always assumed that a plus in the imports or a plus in the exports of precious metals appears only as an effect and concomitant of the proportion between the imports and exports of commodities, whereas they are at the same time an expression of the proportion between the exports and imports of precious metals themselves, independent of the trade of commodities.

3) The predominance of the imports over the exports, and vice versa, is measured on the whole by the increase or decrease of the metal reserve in the central banks. To what extent this scale of measurement is more or less exact, depends, of course, primarily on the degree to which the banking business in general is centralised. For on this premise turns the question, to what extent the precious metal hoarded in the so-called national banks represents the national metal reserve at all. But assuming this to be the case, the scale of measurement is not exact, because an additional import may be absorbed under certain circumstances by the inland circulation and the growing consumption of gold and silver in the making of articles of luxury; furthermore, because without an additional import a withdrawal of gold coin for inland circulation may take place and thus the metal reserve may decrease, even without a simultaneous increase of the export.

4) An export of metals assumes the aspect of a drain, when the movement continues for a long time, so that the decrease represents the tendency of the movement and depresses the metal reserve of the bank considerably below its average level, down to about its average minimum. This minimum is in so far more or less arbitrarily fixed, as it is differently determined in every individual case by the legislation concerning the backing of notes, etc., by cash. Concerning the quantitative limits, which such a drain may reach

in England, Newmarch testified before the Committee on B. A., 1857, Evidence No. 1494: "To judge by experience, it is very unlikely that the drain of metal as a result of some fluctuation in the foreign business will exceed three or four million pounds sterling." — In 1847 the lowest level of the gold reserve of the Bank of England, on October 23, showed a minus of 5,198,156 pounds sterling as compared to that of December 26, 1846, and a minus of 6,453,748 pounds sterling as compared to the highest level on August 29, 1846.

5) The functions of the metal reserve of the so-called national banks, which functions, however, do not by themselves regulate the magnitude of this reserve, for it may grow through a mere paralisation of internal commerce, are threefold: 1) It is a reserve fund for international payments, in one word a reserve fund of world money; 2) it is a reserve fund for the alternately expanding and contracting metal circulation of the inland markets; 3) it is a reserve fund for the payment of deposits and for the convertibility of notes, and this part of its function is connected with the function of the bank and has nothing to do with the functions of money as mere money. It may, therefore, also be touched by conditions, which affect every one of these three functions. As an international fund it, may be touched by the balance of payment, no matter by what causes this may be determined, and whatever may be its proportion to the balance of trade. As a reserve fund for the metal circulation of the inland market it may be touched by its expansion or contraction. The third function, that of a fund guaranteeing the convertibility of the notes, while it does not determine the independent movements of the metal reserve, has a double effect. If notes are issued, which replace the metallic money in the inland circulation (which may also consist of silver in countries where silver is a measure of value), then the second function of the reserve fund is eliminated. And a portion of the precious metal, which performed its function, will permanently wander into foreign countries. In this case no withdrawal of metallic money for inland circulation takes place, and this does away at the same time with the temporary

augmentation of the metal reserve by the immobilised part of the circulating metal coin. Furthermore, if a minimum of a metal reserve must be kept under all circumstances, it affects in a peculiar way the results of a drain or an addition of gold; it affects that part of the reserve, which the bank is compelled to maintain under all circumstances, or that part, which it seeks to get rid of as useless at a certain time. If the circulation were purely metallic and the banking system concentrated, the bank would have to consider its metal reserve likewise as a security for the payment of its deposits, and a drain of metal might then cause such a panic as was witnessed in Hamburg in 1857.

6) With the exception of 1837, the real crisis broke out always after the rates of exchange had been altered, that is, as soon as the import of precious metal had increased over the export.

In 1825 the real crash came after the drain of gold had ceased. In 1839 a drain of gold took place without bringing a crash. In 1847 the drain of gold ceased in April and the crash came in October. In 1857 the drain of gold to foreign countries had ceased since the beginning of November, and the crash did not come until later in November.

This stands out particularly in the crisis of 1847, when the drain of gold ceased already in April, after causing a slight preliminary crisis, and the real business crisis did not come until October.

The following evidence was given before the Secret Committee of the House of Lords on Commercial Distress, 1848. This evidence was not printed until 1857 (also quoted as C. D. 1848–57).

Evidence of Tooke. In April, 1847, a stringency arose, which strictly speaking equalled a panic, but was of relatively short duration and not accompanied by any commercial failures of importance. In October the stringency was far more intensive than at any time during April, an almost unheard of number of commercial failures taking place (2196).— In April the rates of exchange, particularly with America, compelled us to export a considerable amount of

gold in payment for unusually large imports; only by an extreme effort did the bank stop the drain and drive the rates higher (2197).— In October the rates of exchange favored England (2198).— The change in the rates of exchange had begun in the third week of April (3000).— They fluctuated in July and August; since the beginning of August they always favored England (3001).— The drain of gold in August arose from a demand for internal circulation.

J. Morris, Governor of the Bank of England: Although the rate of exchange favored England since August, 1847, and an import of gold had taken place in consequence, the metal reserve of the bank decreased nevertheless. "2,200,000 pounds sterling went out to the country, as a result of inland demand." (137) — This is explained on the one hand by an increased employment of laborers in railroad construction, on the other by a "desire of the bankers to possess their own gold reserve in times of crisis." (147.)

Palmer, Ex-Governor and since 1811 a Director of the Bank of England: 684. "During the entire period from the middle of April, 1847 to the day of the suspension of the Bank Act of 1844 the rates of exchange were in favor of England."

The drain of metal, which created in April, 1847, an independent money panic, was here, as always, but a precursor of the crisis and had already been turned back, when the crisis broke out. In 1839 a heavy drain of metal took place, for corn, etc., while the business was strongly depressed, but without any crisis and money panic.

7) As soon as the universal crises have spent themselves, the gold and silver, aside from an addition of new precious metals from the sources of production, distributes itself once more in such proportions as it showed in the form of the individual reserve of the various countries in a condition of equilibrium. Other circumstances remaining the same, its relative magnitude in every country will be determined by the role of that country in the world market. It flows away from the country which had more than its normal portion into some other country. These movements of outgoing and

incoming metal restore merely its original distribution among the various national reserves. This redistribution, however, is brought about by the effects of different circumstances, which will be mentioned in our treatment of rates of exchange. As soon as the normal distribution is once more a fact, a stage of growth follows first, and then again a drain. [This last sentence applies, of course, only to England, as the center of the world's money market.— F.E.]

8) The drains of metal are generally a symptom of a change in the condition of foreign commerce, and this change in its turn is a premonition that conditions are approaching a crisis.[107]

9) The balance of payment may favor Asia against Europe and America.[108]

An import of precious metals takes place to a point of predominance in two phases. On the one hand it takes place in the first phase of a low rate of interest, which follows upon a crisis and expresses a restriction of production; and then in the second phase, in which the rate of interest rises, without, however, attaining its medium level. This is the phase, in which returns come easy, commercial profit is large, and therefore the demand for loan capital does not grow in proportion to the expansion of production. In both phases, in which loan capital is relatively abundant, the superfluous addition of capital existing in the form of gold and silver, a form in which it can primarily serve only as loan capital, must seriously affect the rate of interest and with it the tone of the whole business.

On the other hand, a drain, a continued and heavy outpour

[107] According to Newmarch, a drain of gold to foreign countries may arise from three causes: 1) from purely commercial conditions, that is, if the imports have exceeded the exports, as was the case during the time from 1836 to 1844, and again in 1847, principally a heavy import of corn; 2) from a desire to secure the means for the investment of English capital in foreign countries, as in 1857 for railroads in India; and 3) from a necessity of making definite expenditures in foreign countries, as in 1853 and 1854 for purposes of war in the Orient.

[108] 1918. Newmarch. "If you take India and China together, if you take into account the transactions between India and Australia, and the still more important ones between China and the United States, and in these instances the business is a three-cornered one and the equilibration takes place through our intervention . . . then it is correct that the balance of trade was not only against England, but also against France and the United States."—(B. A., 1857.)

of precious metals, takes place as soon as the returns are no longer easy, the markets overstocked, and the seeming prosperity held up only by credit; in other words, as soon as a very much increased demand for loan capital exists and the rate of interest has, for this reason, reached at least its medium level. Under these circumstances, which are reflected by the drain of precious metals, the effect of the continued withdrawal of capital in a form, in which it is directly loanable money-capital, is considerably intensified. This must have a direct influence on the rate of interest. But instead of restricting the credit business, the rise of the rate of interest extends it and leads to an overstraining of all its resources. This period, therefore, precedes the crash.

Newmarch is asked, B. A. 1857, No. 1520: "The amount of the circulating bills of exchange, then, rises with the rate of interest?" — "It seems so." — 1522. "In quiet, ordinary times the ledger is the actual instrument of exchange; but when difficulties arise, for instance, if the discount rate of the Bank is raised under circumstances such as I have mentioned . . . then the transactions resolve themselves quite of their own account into the drawing of bills; these bills are not only better suited to serve as a legal evidence of the making of some business transaction, but they are also better adapted to the purpose of making other purchases, and they are above all useful as a means of credit for taking up capital." — This is further intensified by the fact that as soon as signs of threatening conditions induce the bank to raise its rate of discount, which implies the possibility that the bank may at the same time cut down the running time of the bills to be discounted by it, the general apprehension is spread, that this will grow worse. Every one, and first of all the credit swindler, will therefore strive to discount the future and have as many means of credit as possible at his command when the critical time comes. The above-mentioned reasons, then, amount in fact to this, that it is not the mere quantity of the imported or exported precious metals which exerts its influence in this capacity but

that this quantity works its effect, first, by the specific character of precious metals of being capital in the form of money, and secondly, that it works like a feather, which, added to the weight on the scales, suffice to incline the oscillating balance definitely to one side, that is, it works this effect, because it arises under conditions, when a little excess decides in favor of one side or the other. Without these reasons it would be quite inexplicable, why a drain of gold amounting to about five or eight million pounds sterling, and this is the limit according to present experience, should be able to exert any considerable influence. This small minus or plus of capital, which seems insignificant even compared to the 70 million pounds in gold which circulate on an average in England, is a vanishing magnitude in a production of such volume as the English.[109]

But it is just the development of the credit and banking business, which tends on the one hand to press all money-capital into the service of production (or what amounts to the same, to convert all money incomes into capital), and which on the other hand reduces the metal reserve to a minimum in a certain phase of the cycle, so that it can no longer perform the functions for which it is intended. It is the developed credit and banking system, which creates this oversensitiveness of the whole organism of the reserve below or above its average level is a relatively insignificant matter. On the other hand, even a very considerable drain of gold is relatively ineffective, unless it arises in the critical period of the industrial cycle.

In this explanation we have not considered the cases, in which a drain of gold takes place as a result of crop failures, etc. In this case the great and sudden disturbance of the equilibrium of production, whose expression this drain is,

[109] See, for instance, the ridiculous answer of Weguelin, who says that five millions of drained gold is so much capital less, and who attempts to explain in this way certain phenomena, which do not appear when the actual industrial capital is infinitely more raised or depressed in price, expanded or contracted. On the other hand, it is just as ridiculous to attempt to explain these phenomena directly as symptoms of an expansion or contraction of the mass of real capital (that is, the material elements of capital).

requires no further explanation of its effects. These effects are so much greater, the more such a disturbance begins in a period, in which production works under high pressure.

We have also left out of consideration the function of the metal reserve as a security for the convertibility of the bank notes and as the cardinal point of the credit system. The central bank is the pivot of the credit system. And the metal reserve in its turn is the pivot of the bank.[110]

The transition from the credit system to the monetary system is necessary, as I have already shown in Volume I, chapter III, under the head of "Means of Payment." That the greatest sacrifices of real wealth are necessary, in order to maintain the metallic basis in a critical moment, has been admitted by both Tooke and Loyd-Overstone. The controversy turns merely around a plus or minus, and around the more or less rational treatment of the inevitable.[111] A certain quantity of metal, insignificant compared with the total production, is admitted to be the pivotal point of the system. Hence its beautiful theoretical dualism, aside from the appalling demonstration of this character in its capacity as the pivotal point of crises. So long as enlightened bourgeois economy treats of "Capital" in its official capacity, it looks down upon gold and silver with the greatest disdain, considering them as the most immaterial and useless forms of wealth. But as soon as it treats of the banking system, everything is reversed, and gold and silver become capital *par excellence*, for whose preservation every other form of capital and labor is to be sacrificed. But how are gold and silver distinguished from other forms of wealth? Not by the magnitude of their value, for this is determined by the quantity of labor materialised

[110] Newmarch, B. A., 1857, No. 1364: "The metal reserve in the Bank of England is in fact . . . the central reserve or the central metal hoard, on the basis of which the entire business of the country is carried on. It is so to say the cardinal point, around which the entire business of the country has to turn; all other banks in the country consider the Bank of England as the central treasury, or the reservoir, from which they have to draw their reserves of hard cash; and the effect of the foreign rates of exchange falls always precisely upon this treasury and this reservoir."

[111] "Practically, therefore, both Tooke and Loyd would meet an excessive demand for gold by a premature limitation of credits by raising the rate of interest and reducing advances of capital. Only Loyd causes by his illusion inconvenient and even dangerous [legal] limitations and rules." (*Economist*, 1847, p. 1417.)

in them; but by the fact that they represent independent incarnations, expressions of the social character of wealth. [The wealth of society exists only as the wealth of private individuals, who are its owners. It shows its social capacity only in the fact that these individuals exchange the qualitatively different use-values mutually for the satisfaction of their wants. Under the capitalist production they can do so only by means of money. Thus the wealth of the individual is realised as a social wealth only by means of money. In money, in this thing, the social nature of this wealth is incarnated.— F. E.] This social existence assumes the aspect of a world beyond, of a thing, matter, commodity, by the side of and outside of the real elements of social wealth. So long as production is in a state of flux, this is forgotten. Credit, likewise, in its capacity as a social form of wealth, crowds money out and usurps its place. It is the faith in the social character of production, which gives to the money-form of products the aspect of something disappearing and ideal. But as soon as credit is shaken — and this phase always appears of necessity in the cycles of modern industry — all the real wealth is to be actually and suddenly transformed into money, into gold and silver, a crazy demand, which, however, necessarily grows out of the system itself. And all the gold and silver, which is supposed to satisfy these enormous demands, amounts to a few millions in the cellars of the Bank.[112]

In the effects of the gold drains, then, the fact that production as a social process is not subject to social control is strikingly emphasized by the existence of the social form of wealth outside out of it as a separate thing. The capitalist system of production, it is true, shares this with former systems of production, so far as they rest on the trade with commodities and private exchange. But only in it does this become apparent in the most striking and grotesque form of

[112] "You quite agree that there is no other way to modify the demand for gold than by raising the rate of interest?"— Chapman, associate member of the great bill brokers' firm of Overend Gurney & Co.: "That is my opinion. If our gold falls to a certain point, the best we can do is to ring the alarm bell at once and to say: We are on the decline, and whoever sends gold abroad, must do so at his own peril."— B. A. 1857, Evidence No. 5057.

the most absurd contradiction and nonsense, because, in the first place, production for the direct use of the producers is most completely abolished under the capitalist system, so that wealth exists only as a social process expressed by the interrelations of production and circulation; and in the second place, because capitalist production forever strives to overcome this metallic barrier, the material and phantastic barrier of wealth and its movements, in proportion as the credit system develops, but forever breaks its head on this same barrier.

In the crisis the demand is made, that all bills of exchange, securities, and commodities shall be simultaneously convertible into bank money, and this whole bank money consists of gold.

II. *The Rate of Exchange.*

[The barometer for the international movement of the money metals is the rate of exchange. If England has more payments to make to Germany than Germany to England, the price of marks, expressed in sterling, rises in London, and the price of sterling, expressed in marks, falls in Hamburg and Berlin. If this overbalance of monetary obligations of England toward Germany is not equalised, for instance, by overpurchases of Germany in England, the sterling price for marks on bills of exchange on Germany must rise to a point, where it will pay to send metal (gold coin or bullion) from England to Germany in payment of obligations, instead of sending bills of exchange. This is the typical course of things.

If this export of precious metals assumes a larger scope and lasts longer, then the English bank reserve is touched, and the English money market, with the bank of England at the head, must take precautionary measures. These consist mainly, as we have already seen, in the raising of the rate of interest. When the drain of gold is considerable, the money market is always difficult, that is, the demand for

loan capital in the form of money exceeds the supply by far, and the raising of the rate of interest follows quite naturally from this; the rate of discount fixed by the Bank of England corresponds to this condition and asserts itself on the market. However, there are cases, when the drain of metal is due to other than the ordinary combinations of business (for instance, to loans of foreign states, investment of capital in foreign countries, etc.), when the London money market in that respect does not justify such an effective raise of the rate of interest; in that case the Bank of England must first make money "scarce" by heavy loans in the "open market" and thus create artificially a condition, which justifies a raise of the rate of interest, or renders it necessary; a maneuver, which becomes from year to year more difficult for it.— F. E.]

How this raising of the rate of interest affects the rates of exchange, is shown by the following testimony before the Committe of the Lower House concerning bank legislation in 1857 (quoted as B. A., or B. C., 1857.)

John Stuart Mill: 2176. "When the business has become difficult . . . a considerable fall in the price of securities takes place . . . foreigners order the buying of railroad shares here in England, or English owners of foreign railroad shares sell them to foreign countries . . . to that extent the transfer of gold is avoided."— 2182. "A large and rich class of bankers and dealers in securities, by whom the equalisation of the rate of interest and the equalisation of the commercial barometric pressure between the different countries is generally accomplished . . . is always on the lookout for the purchase of securities, which promise a rise in price . . . the proper place to buy them will be the country which sends gold abroad." — 2183. "These investments of capital took place to a large extent in 1847, enough to reduce the drain of gold."

J. G. Hubbard, Ex-Governor, and since 1838 a Director of the Bank of England: 2545. "There are a large number of European securities . . . which have a European circulation in all the various money markets, and these papers, as

soon as they fall by one or two per cent. in one market, are at once brought up in order to be transferred to markets, where their value has still maintained itself." — 2565. "Are not foreign countries considerably in debt to merchants in England?"— . . . "Very considerably."— 2566. "The collection of these debts might, therefore, suffice by itself to explain a very large accumulation of capital in England?"— "In the year 1847 our position was finally restored by our drawing a line through so and so many millions, which America and Russia formerly owed to England." [England owed these same countries at the same time "so and so many millions" for corn and did not forget to "draw a line" also through the greater portion of these by the bankruptcy of the English debtors. See the report on Bank Acts, 1857, in chapter XXX of this work.] — 2572. "In 1847 the rate of exchange between England and Petersburg stood very high. When the government letter was issued, which authorized the Bank of England to issue bank notes without adhering to the legally prescribed limit of 14 millions [beyond the gold reserve], the condition was that the discount should be kept at 8%. At that moment, and at that rate of discount, it was a profitable business to have gold shipped from Petersburg to London and to lend it out after its arrival at 8% until the three months' bills of exchange should become due, which had been drawn against the sold gold."— 2573. "In all operations with gold many points must be taken into consideration; it depends on the rate of exchange and on the rate of interest, at which money may be invested until the bills drawn against it become due."

III. *Rate of Exchange with Asia.*

The following points are important, partly because they show that England must take refuge to other countries, when its rate of exchange with Asia is unfavorable. These are countries, whose imports from Asia are paid by way of England. On the other part they are important, because Mr. Wilson makes once more the silly attempt here, to identify the effect of an export of precious metal on the rates of ex-

change with the effect of an export of capital in general upon these rates; the export being in either case not for the purpose of paying or buying, but of investing capital. In the first place it goes without saying, that whether so and so many millions of pounds sterling are sent to India in precious metals or railroad rails, in order to be invested in railroads there, these are merely two different forms of transferring the same amount of capital to another country. And this is a form of transfer, which does not enter into accounts of the ordinary mercantile businesses, and for which the exporting country expects no other returns than later on the annual revenue from the income of these railroads. If this export is made in the form of precious metal, it will exert a direct influence upon the money market and with it upon the rate of interest of the country exporting this precious metal, at least under the previously outlined conditions, if not necessarily under all circumstances, since precious metal is directly loanable money-capital and the basis of the entire money-system. This export also affects directly the rate of exchange. For precious metal is exported only for the reason and to the extent that the bills of exchange, say, on India, which are offered in the London money market, do not suffice for the making of these extra payments. In other words, there is a demand for Indian bills of exchange which exceeds their supply, and so the rates turn for a time against England, not because it is in debt to India, but because it has to send extraordinary sums to India. In the long run such a shipment of precious metal to India must have the effect of increasing the Indian demand for British goods, because it indirectly increases the consuming power of India for European goods. But if the capital is shipped in the shape of rails, etc., it cannot have any influence on the rates of exchange, since India has no return payment to make for it. For the same reason this need not have any influence on the money market. Wilson seeks to establish the fact of such an influence by declaring that such an extra expenditure will bring about an extra demand for money accommodation and will thus influence the rate of interest. This may

be the case; but to maintain that it must take place under all circumstances is totally wrong. No matter whether the rails are shipped and laid on English or Indian soil, they represent nothing else but a definite expansion of English production in a definite sphere. To contend that an expansion of production, even to a large volume, cannot take place without driving the rate of interest higher, is absurd. The money accommodation may grow, that is, the amount of business transacted by operations of credit; but these operations may increase also while the rate of interest remains unchanged. This was actually the case during the railroad mania in England during the forties. The rate of interest did not rise. And it is evident, that, so far as actual capital, in this case commodities, are concerned, the effect on the money market will be just the same, whether these commodities are intended for foreign countries or for inland consumption. A difference could be discovered only in the case that the investment of capital on the part of England in foreign countries would have a restraining influence upon its commercial exports, that is, exports for which payment must be made in return, or to the extent that these investments of capital are general symptoms indicating the overstraining of credit and the beginning of swindling operations.

In the following Wilson asks questions and Newmarch answers them.

1786. "You said before, with reference to the silver demand for Eastern Asia, that in your opinion the rates of exchange with India are in favor of England, in spite of the considerable wealth of metal continually sent to Eastern Asia; have you any reasons for this?"—"To be sure. . . . I find that the actual value of the exports of the United Kingdom to India amounted to 7,420,000 pounds sterling in 1851; to this must be added the amount of the bills of exchange of the India House, that is, the funds which the East Indian Company draws from India for the payment of its own expenses. These drafts amounted in that year to 3,200,000 pounds sterling; so that the total exports of the United Kingdom to India amounted to 10,620,000 pounds sterling. In

1855 the actual value of the exports of commodities had risen to 10,350,000 pounds sterling; the drafts of the India House were 3,700,000 pounds sterling; the total exports therefore 14,050,000 pounds sterling. For 1851, I believe, we have no means of ascertaining the actual value of the imports of commodities from India to England; but we have for 1854 and 1855. In 1855 the entire actual value of these imports of commodities from India to England was 12,670,000 pounds sterling and this sum, compared to the 14,050,000 pounds sterling, leaves a balance in favor of England, in the direct commerce between the two countries, amounting to 1,380,000 pounds sterling."

Thereupon Wilson remarks that the rates of exchange are also touched by the indirect commerce. For instance, the exports from India to Australia and North America are covered by drafts on London, and therefore affect the rate of exchange quite in the same way as though the commodities had gone directly from India to England. Furthermore, when India and China are taken together, the balance is against England, since China has continually heavy payments to make to India for opium, and England has to make payment to China, and the amounts go by this circuitous route to India. (1787, 1788.)

1789. Wilson asks now, whether the effect on the rates of exchange will not be the same, no matter whether the capital goes out in the form of iron rails or locomotives, or in the form of metal coin. Newmarch gives the correct answer: The 12 million pounds sterling, which have been sent during the last years to India for railroad construction served to buy an annual income, which India has to pay at regular terms to England. So far as any immediate effect on the precious metal market is concerned, the investment of 12 million pounds sterling can exert any influence only to the extent that metal had to be sent out for an actual investment in money.

1797. Weguelin asks: "If no returns are made for these rails, how can it be said that they affect the rate of exchange?" — "I do not believe that that portion of the expenditure, which is sent abroad in the form of commodities, affects the

stand of the rates of exchange . . . the stand of the rates between two countries is, one may say exclusively, affected by the quantity of the obligations or bills of exchange offered in opposition to them in another country; that is the rational theory of the rate of exchange. As for the shipment of those 12 millions, they were in the first place subscribed here; now, if the business were such, that these entire 12 millions would be deposited in cash in Calcutta, Bombay and Madras . . . this sudden demand would strongly affect the price of silver, just as would be the case if the East India Company were to announce tomorrow, that it would increase its drafts from 3 millions to 12 millions. But one-half of these 12 millions is invested . . . in the purchase of commodities in England . . . iron rails and lumber and other materials . . . it is an investment of English capital, in England itself, for a certain kind of commodities to be shipped to India, and that ends the matter."—1798. Weguelin: "But the production of these commodities of iron and wood required for the railroads produces a heavy consumption of foreign commodities, and this could affect the rate of interest, could it not?"—"Assuredly."

Wilson thinks now, that iron largely represents labor, and that the wages paid for this labor largely represent imported goods (1799), and then he asks further:

1801. "But speaking quite generally: If the commodities, which have been produced by means of the consumption of these imported commodities, are sent out in such a way, that we do not receive any returns for them, either in products or otherwise, would not that have the effect of making the rates of exchange unfavorable for us?"—"This principle is exactly what happened in England during the time of the great railway enterprises [1845]. For three or four years in succession you invested 30 million pounds sterling in railroads and almost the whole in wages. You have maintained during three years in the construction of railroads, locomotives, cars, stations, a greater number of people than in all factory districts together. These people . . . expended their wages in the purchase of tea, sugar, liquor and other foreign com-

modities; these commodities must be imported; but it is certain that during the time that this great investment was being made, the rates of exchange between England and other countries were not materially disturbed. No drain of precious metal took place, on the contrary, rather an addition."

1802. Wilson insists that with a settled balance of trade and par rates between England and India the extra shipment of iron and locomotives "must affect the rate of exchange." Newmarch cannot see it that way, so long as the rails are sent out as an investment of capital and India has no payment to make for them in one form or another; he adds: "I agree with the principle that no country can in the long run have an unfavorable rate of exchange with all countries, with whom it deals; an unfavorable rate of exchange with one country necessarily produces a favorable one with another."— Wilson retorts with this triviality: 1803. "But would not a transfer of capital be the same, whether the capital were sent in this form or that?"— "So far as an indebtedness is concerned, yes."— 1804. "Then, whether you send out precious metal or commodities, the effect of railroad construction in India on the market of capital here would be the same and would increase the value of capital just as though the whole had been sent out in precious metal?"

If the prices of iron did not rise, it was certainly a proof that the "value" of the "capital" contained in the rails had not been increased. What is wanted is the value of money-capital, of the rate of interest. Wilson would like to identify money-capital with capital in general. The simple fact is, primarily, that 12 millions for Indian railroads are subscribed in England. This is a matter which has nothing directly to do with the rates of exchange, and the destination of the 12 millions is also immaterial for the money market. If the money market is in good condition, it need not produce any effect at all on it, just as the English railroad subscriptions in 1844 and 1845 left the money market untouched. If the money market is already somewhat difficult, then the rate of interest might indeed be affected by it, but certainly only in an upward direction, and this would have a favorable effect

for England on the rates of exchange according to Wilson's theory, that is, it would work against the tendency to export precious metal; if not to India, then to some other country. Mr. Wilson jumps from one thing to another. In question 1802 the rates of exchange are supposed to be affected, in question 1804 the "value of capital," two very different things. The rate of interest may affect the rates of exchange, and the rates may affect the rate of interest, but the rate of interest may be stable while the rates of exchange fluctuate, and the rates of exchange may be stable while the rate of interest fluctuates. Wilson cannot understand, that the mere form, in which capital is shipped abroad, should make such a difference in the effect, that is, that the difference in the form of capital should have such an effect, not to mention its money form, which runs very much counter to the enlightened economy. Newmarch answers Wilson's question onesidedly inasmuch as he does not point out that he has jumped so suddenly and without reason from the rate of exchange to the rate of interest. Newmarch answers question 1804 uncertainly and doubtfully: "No doubt, if 12 millions are to be raised, it is immaterial, so far as the general rate of interest is concerned, whether these 12 millions are to be sent out in precious metals or in materials. I believe, however" [a fine transition, this however, when he intends to say the exact opposite] "that this is not quite immaterial" [it is immaterial, but, however, it is not material] "because in the one case the six million pounds sterling would return immediately; in the other case they would not return so quickly. Therefore it would make some" [what definiteness!] "difference, whether the six millions were invested here at home or sent entirely abroad." What does he mean by saying that the six millions would return immediately? To the extent that the six million pounds sterling have been spent in England, they exist in rails, locomotives, etc., which are shipped to India, whence they do not return, and their value returns very slowly through a sinking fund, whereas six millions in precious metals may return very quickly in their natural form. To the extent that six millions have been spent in wages, they have been consumed; but

the money, in which they were paid, circulates in the country the same as ever or forms a reserve. The same is true of the profits of the producers of iron rails and of that portion of the six millions which makes good their constant capital. This ambiguous phrase of the return of values is used by Newmarch only in order to avoid saying directly: The money has remained in the country, and so far as it serves as loanable money-capital the difference for the money-market (aside from the possibility that the circulation might have swallowed more hard cash) is only this, that it is spent for the account of A instead of B. An investment of this kind, where the capital is transferred to other countries in commodities, not in precious metals, cannot affect the rate of exchange, unless the production of these exported commodities requires an extra-import of other foreign commodities, and this, at any rate, does not affect the rate of exchange with the country in which the exported capital is invested. This production is not intended to settle for this extra import. The same takes place in every export on credit, no matter whether it be intended for investment as capital or for ordinary purposes of commerce. Besides, such an extra import may also cause a reaction in the way of an extra demand for English goods, for instance, on the part of the colonies or of the United States.

Before that Newmarch said that owing to the drafts of the East India Company the exports from England to India were larger than the imports. Sir Charles Wood cross-examines him on this score. This excess of the English exports to India over the imports from India is actually due to imports from India, for which England does not pay any equivalent. The drafts of the East India Company (now of the British government) resolve themselves into a tribute levied on India. For instance, in 1855 the imports from India to England amounted to 12,670,000 pounds sterling; the English exports to India amounted to 10,350,000 pounds sterling; balance in India's favor 2,250,000 pounds sterling. "If the matter were exhausted with this, then these 2,250,000 pounds sterling

would have to be remitted to India in some form. But then come the invitations from the India House. The India House announces that it is in a position to issue drafts on the different presidencies in India to the amount of 3,250,000 pounds sterling. [This amount was levied for the London expenses of the East India Company and for the dividends due to the stockholders.] And this liquidates not merely the balance of 2,250,000 pounds sterling, which arose in a business way, but gives besides a surplus of one million." (1917.)

1922. Wood: "Then the effect of these drafts of the India House is not to increase the exports to India, but to reduce them to that extent?" [He means to say to reduce the necessity of covering the imports from India by exports to India to the same amount.] Mr. Newmarch explains this by saying that the British export for these 3,700,000 pounds sterling a "good government" to India (1925). Wood, knowing very well the kind of "good government" exported to India by the British, having been Minister to India, replies correctly and ironically: 1926. "Then the exports, which, as you say, are caused by the India House drafts, are exports of good government, and not of commodities."— Since England exports a good deal "in this way" in the shape of "good government" and for investment of capital in foreign countries, things which are quite independent of the ordinary run of business, tributes which consist either in payment for "good government" or in revenues from capital invested in the colonies or elsewhere, tributes for which it does not have to pay any equivalent, it is evident, that the rates of exchange are not affected, when England simply consumes these tributes without making any exports in return for them. Hence it is also evident that the rates of exchange are not affected, when it reinvests these tributes, not in England, but productively or unproductively in foreign countries; for instance, when it sends ammunition to the Crimea with them. Moreover, to the extent that the imports from abroad pass into the revenue of England — of course, they must first have been paid, either in the form of tributes for which no equivalent return is made, or by exchanging things for these tributes be-

fore they have been paid, or by the ordinary course of commerce — England can either consume them or reinvest them as capital. Neither the one nor the other thing touches the rates of exchange, and this is what Wilson overlooks. Whether a domestic or a foreign product forms a part of the revenue — and this last case requires merely an exchange of domestic for foreign products — the consumption of this revenue, be it productive or unproductive, alters nothing in the rates of exchange, even though it may alter the scale of production. The following remarks should be judged by the foregoing explanation:

1934. Wood asks Newmarch, how the shipment of war supplies to the Crimea would affect the rates of exchange with Turkey. Newmarch replies: "I do not see, that the mere shipment of war supplies would necessarily affect the rates of exchange, but the shipment of precious metals would surely affect these rates." In this case he distinguishes capital in the form of money from capital in other forms. But now Wilson asks:

1935. "If you promote an export on a large scale of some article for which no corresponding import takes place, you do not pay the foreign debts, which you have contracted by your imports, and for this reason you must affect the rates of exchange by these transactions, since the foreign debts are not paid, because your export has no corresponding import.— This is true of countries in general." [Mr. Wilson forgets, that there are very considerable imports into England, for which no corresponding exports have ever taken place, except in the form of "good government" or of formerly exported capital for investment; at any rate imports which do not pass into the regular commercial movement. But these imports are again exchanged, for instance, for American products, and the fact that American goods are exported without any corresponding imports does not alter the fact that the value of these imports may be consumed without any equivalent return abroad; they have been received without being balanced by any corresponding exports, and may also be used up without entering into the balance of trade. On the other hand, if

these imports have already been paid by you, for instance, by credit given to foreign countries, then no debt is contracted through this, and the question has nothing to do with the international balance; it resolves itself into productive and unproductive expenditures, no matter whether the products so used are domestic or foreign.]

This lecture of Wilson's amounts to saying that every export without a corresponding import is at the same time an import without a corresponding export, because foreign, hence imported, commodities enter into the production of the exported article. The assumption is that every export of this kind is based on some unpaid import, or creates it, resulting in a debt to a foreign country. This is wrong, even aside from the two following circumstances. 1) England receives imports free of charge, for which it pays no equivalent, such as a portion of its Indian imports. It may exchange these for American imports, and may export the latter without any imports to counterbalance them; but at any rate, so far as this value is concerned, it has only exported something that did not cost it anything. 2) England may have paid for imports, for instance American imports, which form additional capital; if it consumes these unproductively, for instance, using them as war materials, this does not constitute any debt towards America and does not affect the rates of exchange with America. Newmarch contradicts himself in numbers 1934 and 1935, and Wood calls his attention to this, in number 1938: "If no portion of the commodities employed in the manufacture of articles, which we export without receiving any returns [war materials], comes from the country into which these articles are sent, how does that touch the rate of exchange with that country? Suppose that commerce with Turkey is in the ordinary condition of equilibrium; how is the rate of exchange between us and Turkey affected by the export of war materials to the Crimea?"— Here Newmarch loses his equanimity; he forgets that he has answered the same simple question correctly in No. 1934, and says: "We have, it seems to me, exhausted the practical question, and we are

now getting into a very high region of metaphysical discussion."

[Wilson has still another version of his claim, that the rate of exchange is affected by every transfer of capital from one country to another, no matter whether this takes place in the form of precious metals or of commodities. Wilson knows, of course, that the rate of exchange is affected by the rate of interest, particularly by the relation of the rates of interest current in any two countries whose rates of exchange are under discussion. If he can now demonstrate that any surplus of capital, and in the first place commodities of all kinds, including precious metals, contribute their share to influencing the rate of interest, then he makes a step nearer to his goal; a transfer of any considerable portion of this capital to some other country must then change the rate of interest in both countries, in opposite directions, and this must alter in a secondary way the rate of exchange between both countries.—F. E.]

He says, then, in the "*Economist,*" 1847, page 475, which he edited at that time:

1) "It is evident, that such a surplus of capital, indicated by large supplies of all kinds, including precious metals, must lead necessarily, not only to lower prices of commodities in general, but to a lower rate of interest for the use of capital."

2) "If we have a stock of commodities on hand, large enough to supply the country for the coming two years, then a command of these commodities for a given period may be had at a much lower rate than if it would last only for two months."

3) All loans of money, in whatever form they may be made, are merely transfers of the command over commodities from one to another. If, therefore, commodities are superabundant, then the money interest must be low, if they are scarce, it must be high."

4) "If commodities come in more abundantly, the number of sellers compared to the number of buyers must increase,

and in proportion as the quantity exceeds the needs of the direct consumers, an ever larger portion must be stored up for later use. Under these circumstances an owner of commodities will sell at lower conditions on future payment, or on credit, than he would if he were sure that his whole stock would be sold within a few weeks."

Our comment on sentence No. I, is that a strong *addition* to the precious metals may be made while production is simultaneously *contracted,* which is always the case in the period after a crisis. In the subsequent phase precious metals may come in from countries that produce above all precious metals; the imports of other commodities are generally balanced by the exports during this period. In these two phases the rate of interest is low and rises but slowly; we have already explained the reason for this. This low rate of interest may be explained everywhere without any influence of any "Large supplies of any kind." And how is this influence to take place? The low price of cotton, for instance, renders possible the high profits of the spinners, etc. Now why is the rate of interest low? Surely not, because the profit, which may be made on borrowed capital, is high. But simply and solely, because under existing conditions the demand for loan capital does not grow in proportion to this profit; in other words, because loan capital has a different movement than industrial capital. What the "*Economist*" wants to prove is exactly the reverse, namely that the movements of loan capital are identical with those of industrial capital.

Comment on sentence No. 2). If we reduce the absurd assumption of a stock for two years ahead to a point where it begins to take on some meaning, it signifies that the markets are overstocked. This would cause a falling of prices. Less would have to be paid for a bale of cotton. This would by no means justify the conclusion, that the money which is to be used for the payment of this cotton, is more easily borrowed. For this depends on the condition of the money market. If money can be borrowed more easily, it can be so only because the commercial credit is in such shape, that it has to make less use of bank credit than ordinarily. The commodities over-

crowding the market are means of subsistence or means of production. The low price of both increases in this case the profit of the industrial capitalist. Why should these low prices depress the rate of interest, unless it be through the contrast (not the identity) between the abundance of industrial capital and the scarcity of the demand for loan capital? The circumstances are such, that the merchant and the industrial capitalist can more easily give credit to one another; owing to this facilitation of commercial credit, neither the industrial nor the merchant need much bank credit; hence the rate of interest can be low. This low rate of interest has nothing to do with the increase of precious metals, although both of them may run parallel to each other and the same causes, which bring about the low prices of articles of import, may also produce a surplus of precious metals. If the import market were really overcrowded, it would prove a decrease of the demand for imported articles, and this would be inexplicable at low prices, unless it be attributed to a contraction of industrial production at home; but this, again, would be inexplicable, so long as there is an overimportation at low prices. All these absurdities are brought forward for the purpose of proving that a fall of prices is identical with a fall of interest. Both things may, indeed, exist side by side. But if they do, it will be an expression of the opposite directions, in which the movement of industrial capital and of loan capital takes place. It will not be an expression of their identity.

Comment on sentence No. 3). Why money interest should be low, when commodities exist in abundance, is hard to understand, even after the foregoing remarks. If commodities are cheap, then I need, say, only 1,000 pounds sterling instead of 2,000 pounds sterling for a definite quantity which I may want to buy. But perhaps I might invest 2,000 pounds sterling nevertheless, and thus buy twice the quantity which I could have bought formerly. In this way I expand my business by advancing the same capital, which I may have to borrow. I buy 2,000 pounds sterling's worth of commodities, the same as before. My demand on the money market therefore remains the same, even though my demand on the com-

modity-market rises with the fall of the prices of commodities. But if this demand for commodities should decrease, that is, if production should not expand with the fall of the prices of commodities, a thing contrary to all laws of the "*Economist,*" then the demand for loanable money-capital would be decreasing, although the profit would be increasing. But this increasing profit would create a demand for loan capital. For the rest, the low stand of the prices of commodities may be due to three causes. First, to a lack of demand. In that case the rate of interest is low, because production is paralyzed, not because commodities are cheap, since this cheapness is but an expression of that paralysis. In the second place, it may be due to a supply which is excessive compared to the demand. This may be the result of an overcrowding of markets, etc., which may lead to a crisis, and may go hand in hand with a high rate of interest during a crisis; or it may be the result of a fall in the value of commodities, so that the same demand may be satisfied at lower prices. Why should the rate of interest fall in the last case? Because the profits increase? If this should be due to the fact that less money-capital is required for the purpose of obtaining the same productive or commodity-capital, it would merely prove that profit and interest stand in an inverse proportion to one another. Certainly this general statement of the "*Economist*" is wrong. Low money prices of commodities and a low rate of interest do not necessarily go together. Otherwise the rate of interest would be lowest in the poorest countries, in which the money prices of commodities are lowest, and highest in the richest countries, in which the money prices of products of agriculture are highest. In a general way the "*Economist*" admits: If the value of money falls, it exerts no influence on the rate of interest. 100 pounds sterling bring 105 pounds sterling the same as ever. If the 100 pounds sterling are worth less, so are the 105 pounds sterling or the 5 pounds interest. This relation is not affected by the appreciation or depreciation of the original sum. Considered as a value, a definite quantity of commodities is equal to a definite sum of money. If this value rises, it is equal to a larger sum of money; the reverse

takes place when it falls. If the value is 2,000, then 5% of it is 100; if it is 1,000, then 5% of it is 50. This does not alter anything in the rate of interest. The rational part of this matter is merely that a greater pecuniary accommodation is required, when it takes 2,000 pounds sterling to buy the same quantity of commodities, which may be bought for 1,000 pounds sterling at some other time. But this shows at this point merely that profit and interest are inversely proportionate to one another. For profit rises with the cheapness of the elements of constant and variable capital, whereas interest falls. But the reverse may also take place, and does often take place. For instance, cotton may be cheap, because no demand exists for yarn and fabrics; and cotton may be relatively dear, because a large profit in the cotton industry creates a great demand for it. On the other hand the profits of the industrials may be high, just because the price of cotton is low. That list of Hubbard's proves that the rate of interest and the prices of commodities pass through mutually independent movements, whereas the movements of the rate of interest adapt themselves closely to those of the metal reserve and the rates of exchange.

Says the "*Economist*": "If, therefore, commodities are superabundant, then the money interest must be low." It is just the reverse which takes place during crises; the commodities are superabundant, not convertible into money, and therefore the rate of interest is high; in another phase of the cycle the demand for commodities is large, hence returns are easy, while prices of commodities are rising at the same time, and the rate of interest is low on account of the easy returns. "If they [the commodities] are scarce, it must be high." Once more the opposite is true in times of depression after a crisis. Commodities are scarce, absolutely speaking, not merely with reference to the demand; and the rate of interest is low.

Comment on sentence No. 4). It is pretty evident that an owner of commodities, provided he can sell them at all, will get rid of them at a lower price when the market is overcrowded than he will when there is a prospect of a rapid ex-

haustion of the existing supply. But why the rate of interest should fall on that account is not so clear.

If the market is overcrowded with imported commodities, the rate of interest may rise as a result of an increased demand for loan capital on the part of their owners, who may wish to escape the necessity of throwing their commodities on the market. On the other hand, the rate of interest may fall, because the fluidity of commercial credit may keep the demand for bank credit relatively low.

The "*Economist*" mentions the rapid effect on the rates of exchange in 1847, as a consequence of the raising of the rate of interest and other circumstances exerting a pressure on the money market. But it should not be forgotten, that the gold continued to be drained off until the end of April, in spite of the turn in the rates of exchange; a change did not take place in this until the beginning of May.

On January 1, 1847, the metal reserve of the Bank was 15,066,691 pounds sterling; the rate of interest 3½%; rates of exchange for three months on Paris 25.75; on Hamburg 13.10; on Amsterdam 12.3¼. On March 5th the metal reserve had dwindled to 11,595,535 pounds sterling; the discount had risen to 4%; the rate of exchange fell to 25.67½ for Paris; 13.9¼ for Hamburg; 12.2½ for Amsterdam. The drain of gold continued. See the following table:

Date 1847	Precious Metal Reserve of the Bank of England	Money Market	Highest Three Monthly Rates		
			Paris	Hamburg	Amsterdam
March 20	11,231,630	Bk. Dc. 4%	25.67½	13.9 ¾	12.2½
April 3	10,246,630	Bk. Dc. 5%	25.80	13.10	12.3½
April 10	9,867,053	Money very scarce	25.90	13.10⅓	12.4½
April 17	9,329,941	Bk.Dc. 5.5%	26.02½	13.10¾	12.5½
April 24	9,213,890	Pressure	26.05	13.13	12.6
May 1	9,337,716	Increasing Pressure	26.15	13.12¾	12.6½
May 8	9,588,759	Highest Pressure	26.27½	13.15½	12.7¾

In 1847 the total exports of precious metals from England amounted to 8,602,597 pounds sterling.

Of this amount the	United States received	3,226,411	pounds sterling
	France	2,479,892	" "
	Hansa Towns	958,781	" "
	Holland	247,743	" "

In spite of the change in the rates at the end of March the drain of gold continued for another full month, probably to the United States.

"We see here" [says the "*Economist,*" 1847, p. 981], "how rapidly and strikingly the raising of the rate of interest exerted its effect, together with the subsequent money panic, in correcting an unfavorable rate of exchange and turning the tide of gold, so that it flowed once more into England." This effect was produced quite independently of the balance of payment. A higher rate of interest produced a lower price of securities, of English as well as foreign ones, and caused large purchases of them for foreign accounts. This increased the sum of the bills of exchange drawn by way of England, while on the other hand, at the high rate of interest, the difficulty of obtaining money was so great, that the demand for these bills of exchange fell, while their sum rose. It was for the same reason that orders for foreign goods were annulled and the investment of English capital in foreign securities realised and the money taken to England for investment. For instance, we read in the "*Rio de Janeiro Prices Current*" of May 10: "The rate of exchange" [on England] "has experienced a new setback, caused mainly by a pressure on the market for remittances for the realisations on considerable purchases of [Brazilian] government bonds for English account." English capital, which had been invested in foreign countries in various securities, when the rate of interest was very low here, was thus taken back when the rate of interest had risen.

IV. *England's Balance of Trade.*

India alone has to pay 5 millions in tribute for "good government," interest and dividends of British capital, etc., not counting the sums sent home annually by officials as savings of their salaries, or by English merchants as a part of their profit

in order to be invested in England. Every British colony has to make large remittances continually for the same reason. Most of the banks in Australia, West India, Canada, have been founded with English capital, and the dividends are payable in England. In the same way England owns many foreign securities, European, North and South American, on which it draws interest. In addition to this it is interested in foreign railroads, canals, mines, etc., with the corresponding dividends. Remittance on all these items is made almost exclusively in products, in excess of the amount of the English exports. What goes to foreign countries from England to owners of English securities and to be consumed by Englishmen abroad, is a vanishing quantity in comparison.

The question, so far as it concerns the balance of trade and the rates of exchange, is "at every given moment a question of time. As a rule . . . England gives large credits on its exports, while its imports are paid in cash. In certain moments this difference of habit has considerable influence on the rates of exchange. At a time when our exports increase very considerably, as in 1850, there must take place a continual expansion in the investment of British capital . . . in this way remittances of 1850 may be made against goods exported in 1849. But if the exports of 1850 exceed those of 1849 by more than 9 millions, the practical effect must be that more money is sent abroad, to this amount, than returned in the same year. And in this way an effect is produced on the rates of exchange and the rate of interest. But as soon as business is depressed by a crisis, and our exports are greatly reduced, the remittances due for large exports of former years considerably exceed the value of our imports; consequently the rates turn in our favor, capital rapidly accumulates in the home country, and the rate of interest falls." (*Economist*, January 11, 1851.)

The foreign rates of exchange may be altered:

1) In consequence of a momentary balance of payment, no matter to what cause this may be due, whether it be a purely mercantile one, or the investment of capital abroad, or gov-

ernment expenditures, wars, etc., so far as cash payments are made to foreign countries.

2) In consequence of a depreciation of money in a certain country, whether it be metal or paper money. This is purely nominal. If one pound sterling should represent only half as much money as formerly, it would naturally be counted as 12.5 francs instead of 25 francs.

3) When it is a question of the rate of exchange between countries, one of which uses silver, the other gold as "money," the rate of exchange depends upon the relative fluctuations of value of these two metals, since these fluctuations necessarily alter the parity between them. An illustration of this were the rates of exchange in 1850; they were against England, although its export rose enormously. But nevertheless no drain of gold took place. This was the result of a momentary rise in the value of silver as against that of gold. (See *Economist*, November 30, 1857.)

The parity of the rate of exchange is for one pound sterling: on Paris 25.20 francs; Hamburg 13 marks banko 10.5 shillings;* Amsterdam 11 florins 97 centimes. In proportion as the rate of exchange on Paris exceeds 25.20 francs, it becomes more favorable to the English debtor of France, or the buyer of French commodities. In either case he needs less pounds sterling in order to accomplish his purpose.— In more remote countries, where precious metals are not easily obtained, when bills of exchange are scarce and insufficient for the remittances to be made to England, the natural effect is a raising of the prices of such products as are generally shipped to England, a greater demand arising for them, in order to send them to England in place of bills of exchange; this is often the case in India.

An unfavorable rate of exchange, or even a drain of gold, may take place, when there is a great abundance of gold in England, a low rate of interest, and a high price of securities.

In the course of 1848 England received large quantities of silver from India, since good bills of exchange were rare and

* Old style German money, now discarded.— TRANSLATOR.

mediocre ones were not easily accepted, in consequence of the crisis of 1847 and the great lack of credit in the Indian business. All this silver, when hardly arrived, quickly found its way to the continent, where the revolution caused a formation of hoards at all points. The same silver largely made the trip back to India in 1850, since the stand of the rates of exchange made this profitable.

The monetary system is essentially Catholic, the credit system essentially Protestant. "The Scotch hate gold." In the form of paper the monetary existence of commodities has only a social life. It is Faith that makes blessed. Faith in money-value as the imminent spirit of commodities, faith in the prevailing mode of production and its predestined order, faith in the individual agents of production as mere personifications of selfexpanding capital. But the credit system does not emancipate itself from the basis of the monetary system any more than Protestantism emancipates itself from the foundations of Catholicism.

CHAPTER XXXVI.

PRECAPITALIST CONDITIONS.

Interest bearing capital, or usurer's capital, as we may call it in its ancient form, belongs like its twin brother, commercial capital, to the antediluvian forms of capital, which long precede the capitalist mode of production and are found in the most diverse economic formations of society.

The existence of usurer's capital requires merely that at least a portion of the products should be converted into commodities, and that money with its various functions should have developed along with the trade in commodities.

The development of capital attaches itself to that of mer-

chant's capital, more particularly to financial capital. In ancient Rome, starting from the last stages of the republic, when manufacture stood far below its ancient average development, merchants' capital, financial capital, and usurers' capital had reached their highest point within that ancient form.

We have seen that hoarding necessarily appears with money. But the professional hoarder does not become important until he becomes transformed into a usurer.

The merchant borrows money in order to make a profit with it, in order to use it as capital, that is, to spend it as such. Hence the money lender stands in the same relation to him in former stages of society as he does to the modern capitalist. This specific relation was felt also by the Catholic universities. "The universities of Alcala, of Salamanca, of Ingolstadt, of Freiburg in the Breisgau, Mayence, Cologne, Treves, one after another recognized the legality of interest for commercial loans. The first five of these approbations were deposited in the archives of the Consulate of the city of Lyons and published in the appendix of the *Traité de l'usure et des intérêts,* at Lyons, by Bruyset-Ponthus." (M. Augier, *Le Crédit Public,* etc., Paris, 1842, p. 206.)

In all forms, in which slave economy (not the patriarchal kind, but that of later Grecian and Roman times) serves as a means of amassing wealth, where money is a means of appropriating the labor of others by purchase of slaves, land, etc., there money becomes useful as capital, brings interest, for the reason that it may be so invested.

However, the most characteristic forms, in which usurers' capital exists in times antedating capitalist production, are two. I say purposely characteristic forms. The same forms repeat themselves on the basis of capitalist production, but as mere subordinate forms. They are then no longer the forms which determine the character of interest-bearing capital. These two forms are: First, usury by lending money to extravagant persons of the higher classes, particularly to land owners; secondly, usury by lending money to the small producer who is in possession of his own means of employment,

which includes the artisan, but more particularly the peasant, since under precapitalist conditions, so far as they permit of independent individual producers, the peasant class must form the overwhelming majority.

Both the ruin of rich land owners by usury and the spoilation of the small producers leads to the formation and concentration of large money-capitals. But to what extent this process does away with the old mode of production, as happened in modern Europe, and whether it places in its stead the capitalist mode of production, depends entirely upon the stage of historical development and the circumstances surrounding it.

Usurers' capital as the characteristic form of interest-bearing capital corresponds to the predominance of small scale production, of selfemploying peasants and small craft masters. When the laborer is confronted by the means of employment and by the product of labor in the shape of capital, as he is under the capitalist mode of production, he has no occasion to borrow any money as a producer. When he does any borrowing of money, he does it to secure personal necessities, for instance, at the pawnshop. But wherever the laborer is the owner, whether actual or nominal, of his means of employment and of his product, he is confronted as a producer by the capital of the money lender, which stands in his way as a usurer's capital. Newman expresses the matter weakly, when he says that the banker is respected while the usurer is hated and despised, because the banker lends to the rich, whereas the usurer lends to the poor. (J. W. Newman, *Lectures on Political Economy*, London, 1851, p. 44.) He overlooks the fact that the difference of two modes of social production and of the corresponding social orders intervenes here and that the matter is not exhausted by the distinction between rich and poor. On the contrary, the usury which sucks the life out of the small producer goes hand in hand with the usury which sucks the rich owner of large estates dry. As soon as the usury of the Roman patricians had completely ruined the Roman plebeians, the small peasants, this form of exploitation had an end and slave economy undisguised took the place of small peasant economy.

Under the form of interest the whole of the surplus over the necessary means of subsistence (the amount of what becomes wages later on) of the producers may here be devoured by usury (this assumes later the form of profit and ground rent), and hence it is very absurd to compare the level of this interest, which assimilates all the surplus-value with the exception of the share claimed by the state, with the level of the modern rate of interest, which gives to the interest normally no more than a part of the surplus-value. Such a comparison forgets that the wage worker gives to the capitalist, who employs him, profit, interest and ground rent, that is, the whole surplus-value produced by him. Carey makes this absurd comparison in order to show, how advantageous the development of capital and the fall in the rate of interest, that goes with it, is for the laborer. When it is said that the usurer, not content with squeezing the surplus-labor out of his victim, gradually acquires possession of the means of employment, house and land, of this victim and is thus continually engaged in expropriating him, it is forgotten that this complete expropriation of the laborer from his means of employment is not a result which the capitalist mode of production seeks to accomplish, but rather the established condition from which it starts out. The wage slave is barred from becoming a creditor's slave just as the real slave was, at least in his capacity as a producer. The wage slave may eventually become a creditor's slave in his capacity as a consumer. Usurer's capital in this form, in which it appropriates indeed all surplus-labor of the direct producers, does not alter the mode of production. The ownership, or at least the possession of the means of employment by the producers, and small scale production corresponding to this, are its essential prerequisites. Here capital does not subordinate labor to itself directly, and does not confront the laborer as industrial capital, while usurer's capital merely impoverishes this mode of production, paralyzes the productive forces instead of developing them, and at the same time perpetuates these miserable conditions, in which the social productivity of labor is not developed at the expense

of labor itself, as it is under the capitalist mode of production.

On the one hand, usury thus exerts an undermining and destructive influence on ancient and feudal wealth and ancient and feudal property. On the other hand it undermines and ruins small peasants' and small burghers' production, in short all forms, in which the producer still appears as the owner of his conditions of production. Under the developed capitalist mode of production, the laborer is not the owner of his means of employment, of the field which he cultivates, of the raw materials which he works up, etc. But under this system the separation of the producer from the means of employment is the expression of an actual revolution of the mode of production itself. The individual laborers are brought together in large workshops for the purpose of a division of labor, which dovetails one man's activity into another's. The tool becomes a machine. The mode of production no longer permits this dislocation of the means of production, which goes with small property, nor does it permit the isolation of the laborer himself. Under the capitalist mode of production, usury can no longer separate the producer from his means of production, for the simple reason that they have already been separated.

Usury centralises money wealth, where the means of production are disjointed. It does not alter the mode of production, but attaches itself to it as a parasite and makes it miserable. It sucks its blood, kills its nerve, and compels reproduction to proceed under even more disheartening conditions. Hence the popular hatred against usurers, which was most pronounced in the ancient world, where the ownership of the means of production by the producer himself was at the same time the basis of the political conditions, of the independence of the citizen. To the extent that slavery prevails, or to the extent that the surplus product is consumed by the feudal lord and his retinue, while either the slave owner or the feudal lord fall into the clutches of the usurer, the mode of production remains the same. Only, it becomes harder on the laborer. The indebted slave holder or feudal lord becomes more

oppressive, because he is himself more oppressed. Or he makes finally room for the usurer, who becomes a landed proprietor or a slave holder himself, like the knights in ancient Rome. Into the place of the old exploiters, whose exploitation was more or less patriarchal, because it was largely a means of political power, steps a hard, money-mad parvenue, But the mode of production itself is not altered thereby.

Usury works revolutionary effects in all precapitalist modes of production only so far as it destroys and dissolves those forms of property, which form the solid basis of the political organisation, and which must be continually reproduced in order that the political organisation may endure. Under the Asiatic forms usury may last for a long time, without producing anything else but economic disintegration and political rottenness. Not until the other prerequisites of capitalist production are present, does usury become a means of assisting in the formation of the new mode of production, by ruining the feudal lord and small scale production on the one hand, and centralising the means of production into capital on the other.

In the Middle Ages no country had any general rate of interest. The Church forbade all lending at interest from the outset. Laws and courts protected loans but very little. Interest was so much higher in individual cases. The limited circulation of money, the necessity of making most payments in cash, compelled people to borrow money, so much more the less the business of exchanging money was developed. There was a great deal of difference, both in the rates of interest and the conceptions of usury. In the time of Charlemagne it was considered usury to charge 100%. In Lindau on Lake Boden some resident burghers took $216\frac{2}{3}\%$ in 1348. In Zurich the City Council decreed that $43\frac{1}{3}\%$ should be the legal rate of interest. In Italy 40% had to be paid sometimes, although the ordinary rate did not exceed 20% from the 12th to the 14th century. Verona ordered that $12\frac{1}{2}\%$ should be the legal rate. Emperor Frederick II. fixed the rate at 10%, but only for Jews. He did not care to speak for the Christians. In the Rhine provinces 10% was the rule as early as the 13th

century. (Hüllmann, *Geschichte des Städtewesens,* II, pp. 55–57.)

Usurer's capital uses a capital's method of exploitation without its mode of production. This state of affairs repeats itself also inside of bourgeois economy, in backward lines of industry or in those lines, which resist the transition to the modern mode of production. For instance, if we wish to compare the English rate of interest with the Indian, we should not take the rate of interest of the Bank of England, but rather that, say, of the lenders of small machinery to small producers in domestic industry.

Usury as an enemy of consuming wealth is historically important inasmuch as it is itself a process generating capital. Usurer's capital and merchant's wealth promote the formation of moneyed wealth independent of landed property. The less products assume the character of commodities, and the less exchange-value seizes the whole breadth and depth of production, the more does money appear as real wealth, that, is, as wealth in general compared to its limited existence in use-values. This is the basis of hoarding. Aside from money as world money and a hoard, it assumes the absolute form of commodities particularly as a means of payment. And it is especially its function as a means of payment, which develops interest and with it money-capital. What squandering and corrupting wealth wants is money as such, money as a means of buying everything (also as a means of paying debts). The small producer needs money above all to make payments. (The conversion of tithes in kind and service in kind to landlords and to the state into money rent and money taxes plays a great role in this.) In either case money is used as money proper. On the other hand hoarding becomes real only in this way, and thus fulfills the dreams of the usurer. What the owner of a hoard demands is not capital, but money as such; but by means of interest he converts his hoard of money into capital for himself, that is, into a means of grabbing surplus-labor in part or entirely, and with it securing a hold on a part of the requirements of production itself, even though this may remain separate from him as a nominal property of others.

Usury lives apparently in the pores of production in the same way as the gods live in the spaces between worlds according to Epicurus. Money is obtainable so much harder, the less products assume the general form of commodities. Hence the usurer acknowledges no other barrier but the capacity or resistive power of those who need money. In small peasants' and small burghers' production money serves as a means of purchase mainly, whenever the laborer (who is still to a predominant extent the owner of his means of production under these modes of production) loses his means of employment by accident or by extraordinary upheavals, or at least does not become able to recover them in the ordinary course of reproduction. Means of subsistence and raw materials constitute the essential part of these requirements of production. If these become dearer, it may be impossible to reproduce them out of the returns for the product, just as mere crop failures may prevent the peasant from reproducing his seed grain in its natural form. The same wars, by which the Roman patricians ruined the plebeians, by compelling them to serve as soldiers and thus preventing them from reproducing the requirements of their productive activity and making paupers of them (and pauperization, depletion or loss of the prerequisites of reproduction is here the predominent form), filled the sheds and cellars of the patricians with looted copper, the money of that time. Instead of giving to the plebeians directly the necessary commodities, grain, horses, cattle, they loaned to them this copper, for which they had no use themselves, and availed themselves of this condition for the purpose of enforcing enormous interest by usury, thereby turning the plebeians into their debtor slaves. Under the reign of Charlemagne the Frankish peasants were likewise ruined by wars, so that nothing remained to them but to become serfs instead of debtors. In the Roman empire it happened frequently that famines caused the sale of children, or the voluntary sale of free men by themselves, into slavery to the rich. So much for general turning points. In individual cases the maintenance or loss of the requirements of production on the part of the small producers depend on a thousand accidents, and every

one of such accidents or losses signifies impoverishment and becomes an opening, into which the parasite of usury may enter. The mere death of a cow may render the small producer unable to renew his reproduction on the former scale. Then he falls into the clutches of the usurer, and once he is in the usurer's power he never extricates himself.

The typical great and peculiar domain of the usurer, however, is the function of money as a means of payment. Every payment of money, ground rent, tribute, tax, etc., which becomes due at a certain date, carries with it the necessity of securing money for such a purpose. Hence usury attaches itself from the days of the ancient Romans to those of modern times to the tax renters, the *fermiers généraux*, the *receveurs généraux*. Furthermore, commerce and the extension of commodity-production carry with them the separation of purchase and payment by an interval of time. The money has to be on the spot at a definite date. In what manner this may lead to circumstances, in which the money-capitalist and usurer may merge into one even nowadays, is shown by the modern money panics. This same usury, however, becomes one of the principal means of further developing the necessity of using money as a means of payment, by getting the producer ever more deeply into debt and destroying his usual means of payment in such a way that the burden of interest makes even his normal reproduction impossible. In that case usury sprouts up out of money as a means of payment and extends this function of money into its own peculiar domain.

The development of the credit system takes place as a reaction against usury. But this should not be misunderstood, nor interpreted in the manner of the ancient writers, the church fathers, Luther, or the older socialists. It signifies no more and no less than the subordination of interest-bearing capital to the conditions and requirements of the capitalist mode of production.

On the whole, interest-bearing capital under the modern credit-system is adapted to the conditions of the capitalist mode of production. Usury as such does not merely perpetuate itself, but is even freed by nations with a developed

capitalist production from those fetters, which were imposed upon it by the old legislation. Interest-bearing capital retains the form of usurer's capital in its transactions with such persons or classes, or those in such circumstances, as do not borrow in the sense corresponding to the capitalist mode of production, or in which borrowing cannot take place in that sense. This applies to borrowing from individual want at the pawnshop; to lending money for the purpose of squandering on the part of wealthy spendthrifts; or to borrowing money on the part of producers who are not capitalist producers, such as small farmers, craftsmen, etc., who are still the owners of their own requirements of production; finally to borrowing on the part of capitalist producers, who still operate on such a small scale, that they approach those self-employing producers.

What distinguishes the interest-bearing capital, so far as it is an essential element of the capitalist mode of production, from usurer's capital is in no way the nature or the character of this capital itself. It is merely the altered conditions, under which it operates, and consequently the totally changed character of the borrower, who transacts business with the money lender. Even in cases where a man without wealth receives credit in his capacity as an industrial or merchant, it is done for the confident expectation, that he will perform the function of a capitalist and appropriate some unpaid labor with the borrowed capital. He receives credit in his capacity as a potential capitalist. This circumstance, that a man without wealth, but with energy, solidity, ability and business sense may become a capitalist in this way, is very much admired by the apologists of the capitalist system, and the commercial value of each individual is pretty accurately estimated under the capitalist mode of production. Although this circumstance continually brings an unwelcome number of new soldiers of fortune into the field and into competition with the already existing individual capitalists, it also secures the supremacy of capital itself, expands its basis, and enables it to recruit ever new forces for itself out of the lower layers of society. In a similar way the

circumstance, that the Catholic Church in the Middle Ages formed its hierarchy out of the best brains of people without regard to estate, birth, or wealth, was one of the principal means of fortifying priest rule and suppressing the laity. The more a ruling class is able to assimilate the most prominent men of a ruled class, the more solid and dangerous is its rule.

Instead of the anathema against interest-bearing capital in general, it is on the contrary its explicit recognition, from which the initiators of the modern credit system take their start.

We are not speaking here of such reactions against usury, as tried to protect the poor against it, like the *Monts-de-piété* (1350 in Sarlins of the Franche-Comté, later in Perugia and Savona of Italy, 1400 and 1479). These are remarkable mainly because they show the irony of history, which turns pious wishes into their very opposite as soon as they are realised. According to a moderate estimate the English working class pays 100% to the pawnshops, those modern successors of the *Monts-de-piété*.[113] Neither are we speaking of the credit phantasies of a man like Dr. Hugh Chamberleyne or John Briscoe, who attempted during the last decade of the 17th century to emancipate the English aristocracy from usury by means of a country bank with paper money based on real estate.[114]

The credit associations, which were established in the 12th and 14th centuries in Venice and Genoa, arose from the need

[113] "It is in consequence of frequent pawning and redeeming within the same month, and of pawning one article in order to redeem another, and of thus obtaining a small difference in money, that the pawnshop interest becomes so excessive. In London there are 240 authorized pawnshop owners, and in the provinces about 1450. The employed capital is estimated at about one million. It is turned over at least three times per year, and every time at an average of 33⅓%; so that the lower classes of England pay 100% annually for the temporary loan of one million, aside from losses due to lapses of pawned articles." (J. J. Tuckett, *A History of the Past and Present State of the Labouring Population.* London, 1846, I, p. 114.)

[114] Even in the titles of their works they state as their principal purpose "the general welfare of the landed proprietors, the great appreciation of the value of real estate, the liberation of the nobility and of the gentry, etc., from taxation, the augmentation of their annual income, etc." Only the usurers were to lose, those worst enemies of the nation, who had done more injury to the nobility and yeomanry than an army of invasion from France could have done.

of marine commerce and wholesale trade connected with it to emancipate themselves from the domination of ancient usury and from the monopolists of the money business. The fact that the bona fide banks, which were founded in those city-republics, assumed at the same time the shape of institutions for public credit, from which the state received loans on future tax revenues, is explained by the circumstance that the merchants forming such associations were the prominent men of those states and as much interested in emancipating their state as themselves from the exactions of usurers,[115] and at the same time getting a better and more secure control of the states themselves. Hence, when the Bank of England was being planned, the Tories raised the objection: "Banks are republican institutions. Flourishing banks exist in Venice, Genoa, Amsterdam, and Hamburg. But who ever heard of a Bank of France or Spain?"

The Bank of Amsterdam, in 1609, did not mark an epoch in the development of the modern credit system any more than that of Hamburg in 1619. It was purely a bank for deposits. The checks issued by the bank were indeed merely receipts for the deposited, coined and uncoined, precious metal, and circulated only with the endorsement of those who received them. But in Holland commercial credit and dealing in money had developed together with commerce and manufacture, and the interest-bearing capital had been subordinated to industrial and commercial capital by the course of development itself. This showed itself even in the lowness of the rate of interest. And Holland was considered in the 17th century as the model country of economic develop-

[115] "Charles II. of England, for instance, still had to pay enormous interest of usury and agios to the gold smiths" (the precursors of the bankers), "as much as 20 to 30%." A business so profitable induced "the gold smiths to make more and more loans to the King, to anticipate the entire income on taxes to get a lien on every concession of Parliament in the way of money as soon as it had been made, also to compete against one another in buying up and giving pawn on bills, orders and tallies, so that in reality all incomes of the state passed through their hands." (John Francis, *History of the Bank of England*, London, 1848, I p. 31.) "The erection of a bank had been suggested several times before that. It was at last a necessity" (L. c., p. 38). "The bank was a necessity for the government itself, sucked dry by usurers, in order to obtain money at a reasonable rate of interest, on the security of parliamentary concessions." (L. c., p. 59 and 60.)

ment, as England is now. The monopoly of old-style usury, based on poverty, had been overthrown in that country of its own weight.

During the entire 18th century Holland is pointed out as an example and the cry raised for a compulsory lowering of the rate of interest (and legislation acted on this hint), in order to subordinate the interest-bearing capital to the commercial and industrial capital, instead of maintaining the reverse condition. The main spokesman of this movement is Sir Josiah Child, the father of normal English bankerdom. He declaims against the monopoly of the usurers in much the same way that the wholesale clothing manufacturer Moses & Son do when posing as the leaders of the fight against the monopoly of the private tailors. This Josiah Child is at the same time the father of English stock jobbing. Thus he, the autocrat of the East India Company, defends its monopoly in the name of free trade. About Thomas Manley (*"Interest of Money Mistaken"*) he says: "As the champion of the timid and trembling band of usurers he erects his batteries at that point, which I have declared to be the weakest . . . he denies point blank that the low rate of interest is the cause of wealth and vows that it is merely its effect." *Traités sur le Commerce*, etc., 1669, translated in Amsterdam and Berlin, 1754.) "If it is commerce that enriches a country, and if a lowering of interest increases commerce, then a lowering of interest or a restriction of usury is doubtless a fruitful primary cause of the wealth of a nation. It is not at all absurd to say that the same thing may be simultaneously a cause under certain circumstances, and an effect under others." (L. c., p. 55.) "The egg is the cause of the hen, and the hen is the cause of the egg. The lowering of interest may cause an increase of wealth, and the increase of wealth may cause a still greater reduction of interest." (L. c., p. 156.) "I am the defender of industry and my opponent defends laziness and sloth." (P. 179.)

This violent fight against usury, this demand for the subordination of the interest-bearing under the industrial capital, is but the herald of the organic creations, that

establish these prerequisites of capitalist production in the modern banking system, which on the one hand robs usurer's capital of its monopoly by concentrating all fallow money reserves and throwing them on the money-market, and on the other hand limits the monopoly of the precious metals themselves by creating credit-money.

The same opposition to usury, the demand for emancipation of commerce, industry and of the state from usury, which we observe here in the case of Child, will be found in all writings on banking during the last third of the 17th and the beginning of the 18th centuries. With them go also colossal illusions about the miraculous effects of credit, the abolition of the monopoly of precious metals, their displacement by paper, etc. The Scotchman William Patterson, the founder of the Bank of England and the Bank of Scotland, is by all odds Law the First.

Against the Bank of England all goldsmiths and pawnbrokers raised a howl of rage. (Macaulay, *History of England*, IV., p. 499.) During the first ten years the Bank had to struggle with great difficulties; great enmity from without; its notes were only accepted far below their nominal value . . . the goldsmiths (in whose hands the trade with precious metals served as a basis of a primitive banking business) intrigued considerably against the Bank, because their business was reduced by it, their discount lowered, and their business with the government had fallen into the hands of this antagonist. (J. Francis, l. c., p. 73.)

Even before the establishment of the Bank of England a plan for a national bank of credit was suggested in 1683, which had for its purpose, among others, "that business men, when they possess a considerable quantity of goods, may deposit their goods with the assistance of this bank and take up a credit on their tied-up supplies, employ their hands, and increase their business, until they find a good market, instead of selling at a loss." After many difficulties this Bank of Credit was erected in Devonshire House in Bishopsgate Street. It made loans to industrials and merchants on security of deposited goods to the amount of three quarters

of their value, in bills of exchange. In order to make these bills of exchange marketable, a number of people in each branch of business were organised into a society, from whom every possessor of such bills should be able to get goods with the same facility as though he were to offer them cash payment. This bank did not do a flourishing business. Its machinery was too complicated, the risk too great in case of a depreciation of commodities.

If we go by the real content of those writings, which accompany and promote theoretically the formation of the modern credit system in England, we shall not find anything in them but the demand for a subordination of interest-bearing capital, and of loanable means of production in general, under the capitalist mode of production as one of its prerequisites. On the other hand, if we cling to the mere phraseology, we shall be frequently surprised by their agreement, down to the very expressions, with the banking and credit illusions of the Saint-Simonists.

Just as the *cultivateur* in the writings of the physiocrats does not signify the actual tiller of the soil, but the great land owner, so the *travailleur* with Saint-Simon, and continuing on through his disciples, does not signify the laborer, but the industrial and commercial capitalist. "A *travailleur* (worker) needs help, backers, laborers; he looks for such as are intelligent, able, devoted; he puts them to work, and their labor is productive." (*Religion saint-simonienne, Économie politique et Politique.* Paris, 1831, p. 104.)

In fact, one should not forget that only in his last work, *Le Nouveau Christianisme*, does Saint-Simon speak directly for the working class and declare their emancipation to be the end of his efforts. All his former writings are, indeed, mere glorifications of modern bourgeois society against feudal society, or of industrials and bankers against marshals and jurist law-makers of the Napoleonic era. What a difference compared with the contemporaneous writings of Owen![116]

[116] Marx would surely have modified this passage considerably, if he had worked his manuscript over. It was inspired by the rôle of the ex-Saint-Simonists under the second empire in France, where just at the time when Marx wrote the above the world-redeeming credit-phantasies of this school, by force of history as

Among his followers, like wise, the industrial capitalist remains the *travailleur par excellence,* as the above quoted passage indicates. After reading their writings critically, one will not be surprised, that the realization of their dreams of banks and the upshot of their critique materialised in the *Crédit mobilier* founded by the Ex-Saint-Simonist Emile Pereire. This form of credit could become prevalent only in a country like France, where neither the credit system nor great industries had become developed to a modern scale.

In the following passage of the "*Doctrine de Saint-Simon, Exposition, Première année,* 1828–29" (Third edition, Paris, 1831), the germ of the *Crédit mobilier* is already contained. It is easy to understand, that the banker can lend money more cheaply than the capitalist and the private usurer. The bankers are, therefore, "able to procure tools to the industrials far more cheaply, that is, at a lower interest than the real estate owners and capitalists can, who may be more easily mistaken in their choice of borrowers." (P. 202.) But the authors themselves add in a footnote: "The advantage that would follow from an intervention of bankers between the idle and the *travailleurs* is often balanced, or even annulled, by the opportunities offered by our disorganized society to Egoism, which may manifest itself in various forms of fraud and charlatanry. The bankers often come between the idle and the *travailleurs* for the purpose of exploiting both of them to the injury of society." *Travailleur* means here industrial capitalist. For the rest it is a mistake to consider the means at the command of banks merely as means of idle people. In the first place the banks hold that portion of capital, which industrials and merchants own temporarily in

irony, were being realised in the shape of a swindle of a magnitude never witnessed before. Later Marx spoke only with admiration of the genius and encyclopedic brain of Saint-Simon. The peculiarity of this writer in ignoring the antagonism between the bourgeoisie and the proletariat that was just then coming into existence in France, and of counting that part of the bourgeoisie, which was active in production, among the *travailleurs,* corresponds to Fourier's conception, who wanted to reconcile capital and labor. This explains itself out of the economic and political conditions of France in those days. The fact that Owen was more farseeing in this respect is due to his different environment, for he lived in a period of industrial revolution and of class antagonism which were becoming acute.— F. E.

the form of unemployed money, as a money reserve or as capital to be invested. It is idle capital, but not capital of idle people. In the second place the banks hold that portion of the revenues and savings of all kinds which is to be temporarily or permanently accumulated. Both things are essential for the character of the banking system.

But it should never be forgotten, that money, in the first place, in the form of precious metals, remains the basis from which the credit system naturally can never detach itself. In the second place, it must be kept in mind that the credit system has for its premise the monopoly of the social means of production in the hands of private people (in the form of capital and landed property), that it is itself on the one hand an immanent form of the capitalist mode of production, and on the other hand one of the impelling forces of the development of this mode of production to its highest and ultimate form.

The banking system, so far as its formal organisation and centralisation is concerned, is the most artificial and most developed product turned out by the capitalist mode of production, a fact already expressed in 1697 in "*Some Thoughts of the Interests of England.*" This accounts for the immense power of such an institution as the Bank of England over commerce and industry, although their actual movements remain quite outside of its sphere and it is passive toward them. It presents indeed the form of universal bookkeeping and of a distribution of products on a social scale, but only the form. We have seen that the average profit of the individual capitalist, or of every individual capital, is determined, not by the surplus-labor appropriated at first hand by each capital, but by the total quantity of surplus-labor appropriated by the total capital, whereof each individual capital receives a dividend as an aliquot part of the total capital. This social character of capital is promoted and fully realised by the complete development of the credit and banking system. On the other hand this goes still farther. It places at the disposal of the industrial and commercial capitalists all the available, or even potential, capital of society, so far as it

has not been actively invested, so that neither the lender nor the user of such capital are its real owners or producers. This does away with the private character of capital and implies in itself, to that extent, the abolition of capital. By means of the banking system the distribution of capital as a special business, as a social function, is taken out of the hands of the private capitalists and usurers. But at the same time banking and credit thus become the most effective means of driving capitalist production beyond its own boundaries, and one of the most potent instruments of crises and swindle.

The banking system shows, furthermore, by putting different forms of circulating credit in the place of money, that money is in reality nothing but a special expression of the social character of labor and its products, so that this character, as distinguished from the basis of individual production, must present itself in the last analysis as a thing, as a peculiar commodity by the side of the other commodities.

Finally, there is no doubt that the credit system will serve as a powerful lever during the transition from the capitalist mode of production to the production by means of associated labor; but only as one element in connection with other great organic revolutions of the mode of production itself. On the other hand, the illusions concerning the miraculous power of the credit and banking system, as nursed by some socialists, arise from a complete lack of familiarity with the capitalist mode of production and the credit system as one of its forms. As soon as the means of production have ceased to be converted into capital (which includes also the abolition of private property in land), credit as such has no longer any meaning. This was understood also by the advocates of Saint-Simonism. But so long as the capitalist mode of production lasts, interest-bearing capital as one of its forms also continues and constitutes actually the basis of the credit system. Only that sensational writer, Proudhon, who wanted to perpetuate the production of commodities and yet abolish money [117], was capable of dreaming of a *crédit gratuit*, this monster which

[117] Karl Marx, *The Poverty of Philosophy*, 1847.— Karl Marx, *Critique of Political Economy*, p. 107.

was supposed to realise the pious wish of small capitalist production.

In the "*Religion saint-simonienne, Économie et Politique,*" we read on page 45: "Credit serves the purpose, in a society in which some own the instruments of industry without the ability or the will to employ them, and in which other industrious people have no instruments of labor, of transferring these instruments in the easiest manner possible from the hands of the former, their owners, to the hands of the others who know how to use them. Note that this definition regards credit as a result of the way in which *property* is constituted." Therefore credit disappears with this constitution of property. We read, furthermore, on page 98, that the present banks "consider it their business to yield to that movement which is started by the transactions taking place outside of their domain, not to give them an impulse on their part; in other words, the banks perform the role of capitalists in their transactions with those *travailleurs,* to whom they loan money." The idea that the banks themselves should take the lead and distinguish themselves "through the number and usefulness of the organised establishments and of the promoted works" (p. 101) contains the *Crédit mobilier* in embryo. In the same way Charles Pecqueur demands that the banks (or what the Saint-Simonists call a *Système général des banques*) "should rule production." Pecqueur is essentially a Saint-Simonist, only much more radical. He desires that "the credit institute . . . should **control** the entire movement of national production."— "Try to **create** a national credit institute, which shall advance means to propertyless talent and merit, without, however, knitting these borrowers by compulsion into a close solidarity in production and consumption, but on the contrary rather enabling them to determine their own exchanges and production. In this way you will accomplish only what the private banks accomplish even now, that is, anarchy, a disproportion between production and consumption, the sudden ruin of one, and the sudden enrichment of another; so that your institute will never get any farther than the point of producing a great deal of

welfare for one, which amounts to a great deal of suffering endured by another . . . only that you will have given to the wage laborers assisted by you the means of competing among one another in the same way that their capitalist masters do now." (Ch. Pecqueur, *Théorie Nouvelle d'Économie Sociale et Politique,* Paris, 1842, p. 434.)

We have seen that merchants' capital and interest-bearing capital are the most ancient forms of capital. In the nature of the case, interest-bearing capital assumes in the popular conception the form of capital *par excellence.* In the case of merchants' capital, the activity of a middle man is performed, no matter whether it be rated as cheating, labor, or anything else. But in the case of interest-bearing capital the self-reproducing character of capital, the self-expansion of value, the production of surplus-value, surrounds itself with the qualities of the the occult. This accounts for the fact that even a part of the political economists, particularly in countries in which industrial capital is not yet fully developed, as in France, cling to interest-bearing capital as the fundamental form of capital and regard, for instance, ground rent merely as a modified form of it, because the form of lending predominates also in it. In this way the internal articulation of the capitalist mode of production is completely misunderstood, and the fact is entirely overlooked that land, like capital, is loaned only to capitalists. Of course, natural means of production, such as machines, business buildings, etc., may also be loaned instead of money. But they always represent a certain sum of money, and the fact that not only interest, but also wear and tear has to be paid for them, is due to their use-value, the specific natural form of these elements of capital. The thing which decides in this case is whether they are loaned to the direct producers, which would imply the non-existence of the capitalist mode of production, at least in the sphere in which this takes place, or whether they are loaned to the industrial capitalists, which is the basic assumption under the capitalist mode of production. It is still more improper and meaningless to drag the lending of houses, etc., for individual consumption into this part of

the discussion. That the working class is swindled to an enormous extent, in this way as well as in others, is an evident fact; but this is done also by the retail dealer, who sells them means of subsistence. It is a secondary exploitation, which runs parallel with the primary one taking place in the process of production itself. The distinction between selling and loaning is quite immaterial in this case and merely formal, and cannot appear as essential to any one, unless he be wholly unfamiliar with the actual condition of the problem.

Both usury and commerce exploit the various modes of production. They do not create it, but attack it from the outside. Usury tries to maintain it directly, in order to be able to exploit it ever anew, but it is conservative and makes it only more miserable. The less the elements of production enter the process of production as commodities and come out of it as commodities, the more does their descent from money appear as a separate act. The more significant the role played by circulation in the social reproduction, the more does usury flourish.

That moneyed wealth develops as a special kind of wealth means with reference to usurer's capital that it collects all its claims in money. It develops so much more in any country, the more the mass of production limits itself to natural services, etc., that is, to use-values.

To that extent usury has a double effect. First, it frames up an independent moneyed wealth by the side of the merchant class. In the second place it appropriates to itself the prerequisites of labor, that is, it ruins the owners of the old requisites of production. Thus it becomes a powerful lever for the formation of the requirements of industrial capital.

Interest in the Middle Ages.

In the Middle Ages the population was purely agricultural. And there, as under feudal rule, commerce can be but small and consequently profit but slight. Hence the laws against

usury were justified in the Middle Ages. Moreover, in an agricultural country one has rarely any occasion for borrowing money, except when reduced by poverty and misery. . . . Henry VIII limits interest to 10%, Jacob I. to 8%, Charles II, to 6%, Anne to 5%. . . . In those days the money-lenders, if not legally, were at least in fact monopolists, and therefore it was necessary to place them under restriction like other monopolists. . . . In our times the rate of profit regulates the rate of interest; in those times the rate of interest regulated the rate of profit. If the money-lender loaded a heavy rate of interest on the merchant, then the merchant had to add a higher rate of profit to the price of his commodities. Consequently a large sum of money was taken out of the pockets of the buyers in order to put it into the pockets of the money-lenders. (Gilbart, *History and Principles of Banking,* pp. 164, 165.)

"I have been told that 10 gulden are now taken annually on every Leipsic fair, that is 30 on each hundred; some add the Neuenburg fair and make it 40 per hundred; whether that is so, I don't know. For shame, where the devil is that going to end? . . . Whoever has now 100 florins at Leipsic, takes 40 annually, which is the same as devouring one peasant or burgher each year. If one has 1,000 florins, he takes 400 annually, which means devouring a knight or a rich noble per year. If one has 10,000 florins, he takes 4,000 per year, which means devouring a rich count each year. If one has 100,000 florins, as the great merchants must have, he takes 40,000 annually, which means devouring one great rich prince each year. If one has 1,000,000 florins, he takes 400,000 annually, which means devouring one great king each year. And he does not run any risks, either in his person or his wares, does not work, sits near his fireplace and roasts apples; so might a petty robber be sitting at home and devour a whole world in ten years." (*Bücher vom Kaufhandel und Wucher,* 1524. *Luther's Works,* Wittenberg, 1589, Part VI.)

"Fifteen years ago I wrote against usury, when it had spread so alarmingly, that I did not hope for any improve-

ment. Since then it has become so proud, that it does not care to be classed as a vice, sin, or shame, but gets itself praised as a pure virtue and honor, just as though it were doing people a great favor and Christian service. What are we going to do now that shame has become honor and vice virtue? (Martin Luther, *An die Pfarherrn wider den Wucher zu predigen.* Wittenberg,1540.)

Jews, Lombards, usurers and bloodsuckers were our first bankers, our original bank sharks, their character being such as to be called almost infamous. . . . They were joined by the London goldsmiths. On the whole . . . our original bankers . . . were a very bad crowd, they were greedy usurers, stony-hearted vampires. (J. Hardcastle, *Banks and Bankers.* Second edition, London, 1843, pages 19 and 20.)

The example given by Venice (in the matter of establishing a bank) was quickly imitated; all sea towns, and in general all towns which had made a name for themselves by their independence and their commerce, founded their first banks. The return of their ships, which often took a long time, led inevitably to the custom of giving credit, which was further intensified by the discovery of America and the commerce with it. (This is one of the main points.) The freighting of ships made the taking of heavy loans necessary, a thing already occuring in ancient Athens and Greece. In 1380 the Hansa town of Bruges had an insurance company. (M. Augier, l. c., pages 202 and 203.)

To what extent the making of loans to land owners, and to wealth consumers in general, still prevailed in the last third of the 17th century, even in England, before the development of the modern credit system, may be seen in the works of Sir Dudley North, among others. He was not only one of the first English merchants, but also one of the most prominent theoretical economists of his time. And he says: The money loaned among our people at interest is not even to a tenth part given to business people for carrying on their affairs; it is loaned for the greater part for articles of luxury,

and for the expenditures of people, who, although great real estate owners, nevertheless spend money faster than is made by their real estate; and since they hate to sell their estates, prefer to mortgage them. (*Discourses upon Trade.* London, 1691, pages 6 and 7.)

Poland in the 18th century: "Warsaw did a great business in exchange, which, however had for its principal basis and aim the usury of its bankers. In order to secure money, which they might lend to spendthrift nobles at 8% and more, they sought and obtained abroad an exchange credit in blank, that is, it had no commerce with commodities at all for a foundation, but the foreign endorser of the bill stood it patiently, so long as the returns from swindling with bills of exchange did not fail. However, they paid heavily for this by the bankruptcies of men like Tapper and other highly respected Warsaw bankers." (J. G. Büsch, *Theoretisch-praktische Darstellung der Handlung,* etc., third edition, Hamburg, 1808, volume II, pages 232 and 233.)

Advantage of the Prohibition of Interest for the Church.

"The taking of interest had been forbidden by the church. But the sale of property for the purpose of getting out of a tight place had not been forbidden. It had not even been forbidden to transfer property for a certain period to the money lender as a security, until such time as the debtor should repay his loan, so that the money lender might have the use of the property as a reward for the absence of his money. . . . The church itself and the various corporations and communes belonging to it derived much profit from this practice, particularly during the period of the crusades. This brought a very large portion of the national wealth into the possession of the so-called 'dead hand,' all the more so because the Jews were barred from engaging in such usury, the possession of such fixed liens not being concealable. . . . Without the ban on interest the churches and cloisters would never have become so rich." (L. c., p. 55.)

PART VI.

TRANSFORMATION OF SURPLUS PROFIT INTO GROUND-RENT.

CHAPTER XXXVII.

PRELIMINARIES.

The analysis of landed property in its various historical forms belongs outside of the limits of this work. We shall occupy ourselves with it in this place only to the extent that a portion of the surplus-value produced by the industrial capital falls into the hands of the land owner. We assume, then, that agriculture is dominated by the capitalist mode of production, just as manufacture is, in other words, that agriculture is carried on by capitalists, who differ primarily from the other capitalists only through the element, in which their capital and the wage-labor set in motion by this capital are invested. So far as we are concerned, the capitalist farmer produces wheat, etc., in the same way that the manufacturer produces yarn or machines. The assumption that the capitalist mode of production has seized agriculture implies that it rules all spheres of production and bourgeois society, so that its prerequisites, such as free competition among capitals, the possibility of transferring them from one sphere of production to another, a uniform level of the average rate of profit, etc., are fully matured. The form of landed property which we consider here is a specifically historical one, a form *altered* through the influence of capital and of the capitalist mode of production, and evolved either out of feudal land ownership, or out of small peasants' agriculture carried

on for a living, in which the *possession* of land constitutes one of the prerequisites of production for the direct producer, and in which his *ownership* of land appears as the most advantageous condition for the prosperity of *his* mode of production. Just as capitalist production is conditioned in a general way on the expropriation of the laborers from their requirements of production, so capitalist agriculture demands the expropriation of the rural laborers from the land and their subordination to a capitalist, who carries on agriculture for the sake of profit. For the results of our analysis the objection, that other forms of landed property and of agriculture have existed or still exist, is quite irrelevant. Such an objection cannot apply to any one else but to those economists, who treat of the capitalist mode of production in agriculture, and of the form of landed property corresponding to it, as though it were not a historical but an eternal category.

For our purposes it is necessary to study the modern form of landed property, because it is our business to consider the typical conditions of production and commerce, which arise from the investment of capital in agriculture. Without this our analysis of capital would not be complete. We therefore confine ourselves exclusively to the investment of capital in agriculture strictly so-called, that is, capital invested in the production of the principal plant crop, on which a certain population lives. We may say wheat, because it is the principal article of food among the modern capitalistically developed nations (or mining instead of agriculture, because the laws of both are the same).

It is one of the great merits of Adam Smith to have shown that the ground rent for capital invested in the production of such crops as flax, dye stuffs, independent cattle raising, etc., is determined by the ground rent obtained from capital invested in the production of the principal article of subsistence. In fact no progress has been made in this since his time. What we might add in the way of exception or supplement belongs in a separate study of landed property, not here. Hence we shall not speak of landed property outside

of the land destined for the production of wheat in the manner of exports, but shall merely refer to it occasionally by way of illustration.

For the sake of completeness we shall remark, that we include also water, etc., in the term land, so far as it has an owner and belongs as an accessory to the soil.

Landed property is conditioned on the monopolisation of certain portions of the globe by private persons, for the purpose of making these portions the exclusive spheres of their private will and keeping all others away from it.[118] With this in mind, the problem is to ascertain the economic value, that is, the employment of this monopoly on the basis of capitalist production. With the legal power of these persons to use or misuse certain portions of the globe nothing is settled. The use of this power depends wholly upon economic condi-

[118] Nothing could be more comical than Hegel's development of private property in land. According to him, man as an individual must give reality to his will as the soul of external nature, and to this end he must take possession of nature and make her his private property. If this were the destiny of "the individual," of man as an individual, it would follow that every human being must be a landowner, in order to materialise as an individual. Free private property in land, a very recent product, is not a definite social relation, according to Hegel, but a relation of man as an individual to "nature, an absolute right of man to appropriate all things." (Hegel, *Philosophy of Law*, Berlin, 1840, p. 79.) So much at least, is evident, that the individual cannot maintain himself as a landowner by his mere "will" against the will of another individual, who likewise wants to materialise himself in the same piece of land. It requires a good many other things besides the good will. Furthermore, it is absolutely beyond any one's ken to decide, where "the individual" should draw the line for the realisation of his will, whether the presence of his will should materialise in one whole country, or whether it should require a whole bunch of countries by whose appropriation I might "manifest the supremacy of my will over the thing." Here Hegel breaks down. "The appropriation is of a very individual kind; I do not take possession of more than I touch with my body, but the second point is at the same time that external things have a greater extension than I can grasp. While I thus have possession of a thing, something else is likewise in touch with it. I exercise my appropriation by my hand, but its scope may be extended." (P. 90.) But this other thing is again in touch with still another, and so the boundary disappears, within which I might pour my will as the soul of the soil. "If I own anything, my reason at once passes on to the idea that not only this property, but also the thing it touches is mine. Here positive right must fix its boundaries, for nothing more can be deduced from the conception." (P. 91.) This is an extraordinarily naive confession of the "conception," and it proves that this conception, which makes at the outset the mistake of regarding a very definite legal conception of landed property belonging to bourgeois society as an absolute one, does not understand anything of the actual articulations of this property. This implies at the same time the confession, that the "positive" law may, and must, alter its decisions in proportion as the requirements of social, i.e. economic development, change.

tions, which are independent of their will. The legal conception itself signifies nothing else but that the land owner may do with the soil what the owner of commodities may do with them. And this conception, this legal conception of free property in land, arises in the ancient world only with the dissolution of the organic order of society, and in the modern world only with the development of capitalist production. Into Asia it has been imported by Europeans in but a few places. In that Part of our work, which deals with primitive accumulation (Volume I, chapter XXVI), we have seen that this mode of production presupposes on the one hand the separation of the direct producers from their position as mere attachments to the soil (in their capacity of bondsmen, serfs, slaves, etc.), on the other hand the expropriation of the mass of the people from the land. To this extent the monopoly of landed property is a historical premise, and remains the basis, of the capitalist mode of production, just as it does of all other modes of production, which rests on the exploitation of the masses in one form or another. But that form of landed property, which the capitalist mode of production meets in its first stages, does not suit its requirements. It creates for itself that form of property in land, which is adapted to its requirements, by subordinating agriculture to the dominion of capital. It transforms feudal landed property, tribal property, small peasants' property in mark communes, whatever may be their legal form, into the economic form corresponding to the requirements of capitalism. It is one of the great outcomes of the capitalist mode of production, that it transforms agriculture from a merely empirical and mechanically perpetuated process of the least developed part of society into a consciously scientific application of agronomics, so far as this is at all feasible under the conditions going with private property;[119] that it detaches property in

[119] Very conservative agricultural chemists, for instance Johnston, admit that a really rational agriculture meets everywhere insurmountable barriers through the existence of private property. So do writers, who are confessedly advocates of the monopoly of private property on the globe, for instance Charles Comte in his work of two volumes, which has for its special aim the defense of private property. "A nation," says he, "cannot attain to the degree of prosperity and power compatible with its nature, unless every portion of the soil nourishing it is assigned

land on the one side from the relations between master and servant, and on the other hand totally separates land as an instrument of production from property in land and land owners, for whom it represents merely a certain tribute of money, which he collects by force of his monopoly from the industrial capitalist, the capitalist farmer. It dissolves all these connections so thoroughly, that the owner of the land may spend his whole life in Constantinople, while his estates are in Scotland. Private property in land thus receives its purely economic form by discarding all its former political and social trappings and implications, in brief all those traditional accessories, which are denounced as a useless and absurd attachment by the industrial capitalists and their theoretical spokesmen in the heat of their struggle with landed property, as we shall see later. The rationalising of agriculture on the one hand and thus rendering it capable of operation on a social scale, and the reduction *ad absurdum* of private property in land on the other hand, these are the great merits of the capitalist mode of production. Like all its other historical advances it bought these also by first completely pauperizing the direct producers.

Before we pass on to the problem itself, we must make a few more preliminary remarks in order to forestall misunderstanding.

The premises for a capitalist production in agriculture are these: The actual tillers of the soil are wage-laborers, em-

to that purpose which agrees best with the general interest. In order to give to its wealth a strong development, one sole and highly enlightened will should, if possible, take it upon himself to assign to each piece of his domain its task and make every piece contribute to the prosperity of all others. But the existence of such a will . . . would be incompatible with the division of the land into private plots . . . and with the ability of each owner to dispose of his property in an almost absolute manner, according to constitutional guarantees."— Johnston, Comte, and others, have in mind only the necessity of tilling the land of a certain country as a whole, when they speak of an antagonism of private property to a rational system of agronomics. But the dependence of the cultivation of particular products of the soil upon the fluctuations of market prices, and the continual changes of this cultivation with these fluctuations of prices, the whole spirit of capitalist production, which is directed toward the immediate gain of money, contradicts agriculture, which has to minister to the entire range of permanent necessities of life required by a network of human generations. A striking illustration of this is furnished by the forests, which are occasionally managed in a way befitting the interests of society as a whole, when they are not private property, but subject to the control of the state.

ployed by a capitalist, the capitalist farmer, who carries on agriculture merely as a special field of exploitation for his capital, an investment of his capital in a special sphere of production. This renting capitalist pays to the land owner, the owner of the soil exploited by him, a sum of money at definite periods fixed by contract, for instance annually (just as the borrower of money-capital pays a fixed interest), for the permission to invest his capital in this particular sphere of production. This sum of money is called *ground-rent,* no matter whether it is paid for agriculture soil, building lots, mines, fishing grounds, forests, etc. It is paid for the entire time, during which the land owner has rented his land to the capitalist by contract. Ground-rent, therefore, is that form, in which property in land realizes itself economically, that is, produces value. Here, then, we have all three classes together, which constitute the frame work of modern society, and they have divergent interests — wage-laborers, industrial capitalists, land owners.

Capital may be fixed in the soil, may be incorporated in it, either in a transient manner, as it is by improvements of a chemical nature, fertilization, etc., or more permanently, as in drainage canals, irrigation works, leveling, farm buildings, etc. In another place I have called the capital thus incorporated in the soil *land-capital.*[120] It belongs in the categories of fixed capital. The interest on the capital thus incorporated in the soil and the improvements thus made in it as an instrument of production may form a part of the rent paid by the capitalist farmer to the land owner,[121] but it does not constitute that ground-rent, strictly speaking, which is paid for the use of the soil as such, whether it be in a natural state or cultivated. In a systematic treatment of private property in land, which is not included in our plan, this part

[120] *The Poverty of Philosophy,* p. 148. There I have made a distinction between land-capital and material land. "By merely applying additional capital to land already transformed into means of production land-capital may be augmented without adding anything to the material land, that is to say, to the extent of the land. . . . As capital, land is not more eternal than any other capital. . . . Land-capital is fixed capital, but fixed capital is used up as well as circulating capital."

[121] I say "may," because under certain circumstances this interest is regulated by the law of ground-rent and may disappear, for instance, in the case of competition between lands of great natural fertility.

of the revenue of the land owner would have to be discussed at length. But a few words about it will suffice here. The more transient investments of capital which go with the ordinary processes of production in agriculture, are made without exception by the capitalist farmer. These investments, like cultivation proper, improve the soil,[122] if cultivation is carried on in a moderately rational manner and does not reduce itself to a brutal spoilation of the soil, such as used to be in vogue among the former slave holders in the United States, a thing against which the land owners may provide by contract. In this way material land is transformed into land-capital. A cultivated field is worth more than an uncultivated one of the same natural quality. Likewise the more permanent fixed capitals, which are incorporated in the soil and worn out in longer time, are largely, and in some spheres often exclusively, invested by the capitalist farmer. But as soon as the time stipulated by contract has expired — and this is one of the reasons why the land owners seek to shorten the time of contract as much as possible when capitalist production develops — the improvements embodied in the soil become the property of the land owner as an inseparable part of the land. In the new contract, which the land owner makes, he adds the interest for the capital incorporated in the soil to the real ground-rent. And he does this whether he leases the land to the same capitalist who made these improvements or to some other capitalist farmer. His rent is thus increased; or, if he wishes to sell his land (we shall see immediately how its price is determined), its value has risen. He sells not merely the soil, but the improved soil, the capital incorporated in the soil for which he did not pay anything. Quite aside from the movements of real ground-rent, this is one of the secrets of the increasing enrichment of the land owners, of the continuous inflation of their rents, and of the growing money-value of real estate in proportion as economic development proceeds. Thus they pocket a result of social development brought about without

[122] See James Anderson and Carey.

their help, *fruges consumere nati,* they are born to consume the fruits of the earth. But this is at the same time one of the greatest obstacles to a rational development of agriculture, because the capitalist renter avoids all improvements and expenses, for which he cannot expect any returns during the time of his lease. We find this fact denounced as such an obstacle, not only in the 18th century by James Anderson, the actual discoverer of the modern theory of rent, who was also a practical capitalist farmer and an advanced agronomist for his time, but also in our own days by the opponents of the present constitution of landed property in England.

A. A. Walton, in his "*History of the Landed Tenures of Great Britain and Ireland,*" London, 1865, says on this score: All the efforts of the numerous agricultural institutes in our country cannot accomplish any very important or really appreciable results in the actual progress of improved cultivation, so long as such improvements increase in a far higher degree the value of real estate and the size of the rent roll of the land owner, than they improve the condition of the tenant or the farm laborer. The tenants in general know quite as well as the land owner, his rent collector, or even the president of an agricultural society, that good drainage, ample manuring, and good management, together with an increased application of labor, cleaning the land thoroughly and working it over, will produce wonderful results, both in the improvement of the soil and in an increased production. But all this demands considerable expense, and the tenants also know very well, that no matter how much they may improve the soil or raise its value, the land owner will in the long run get the principal benefit of it in raised rents and increased land values. . . . They are cunning enough to observe, what those speakers [land owners and their agents speaking at agricultural feasts] always forget to tell them, namely that the lion's share of all improvements made by the tenants must always pass ultimately into the pockets of the land owners. . . . No matter how much the former tenant may have improved his leasehold, his successor will always find, that

the land owner will raise the rent in proportion to the increased land value due to previous improvements. (Pages 96 and 97.)

In agriculture proper this process does not yet appear quite so plainly as when the land is used for building lots. The overwhelming part of the land used in England for building purposes, but not sold as a freehold, is rented by the land owners for 99 years, or for a shorter time if possible. After the lapse of this time the buildings fall into the hands of the land owner together with the land. The tenants are obliged, says Walton, to deliver the house to the great land owner in a good inhabitable condition after the expiration of the lease, after they have paid up to this time an exorbitant ground-rent. Hardly has the lease expired, when the agent or inspector of the landlord comes, inspects your house, takes care that you get it into good condition, takes possession of it and annexes it to the domain of his landlord. The fact is that if this system is permitted to exert its full effects for some time longer, the entire ownership of houses as well as of country real estate will be in the hands of the great landed proprietors. The whole West End of London, north and south of Temple Bar, belongs almost exclusively to half a dozen great landlords, is rented at enormous ground-rents, and if the leases have not quite expired, most of them expire in rapid succession. The same applies in a greater or smaller degree to every city in the Kingdom. But even here this greedy system of exclusiveness and monopoly does not stop. Nearly all the docking facilities of our port cities are in the hands of the great land leviathans in consequence of the same process of usurpation. (L. c., p. 93.) Under these circumstances it is evident that if the census for England and Wales in 1861 gives the total population as 20,066,224 and the number of house owners as 36,032, the proportion of the owners to the number of houses and to the population would take on a very different aspect, if the great house owners were placed on one side and the small ones on the other.

This illustration of property in buildings is important. In the first place, it clearly shows the difference between real

ground-rent and interest on fixed capital incorporated in the soil, which may form an addition to the ground-rent. The interest on buildings, like that on capital incorporated in the soil by the tenant, falls into the hands of the industrial capitalist, the building speculator, or the tenant, so long as the lease lasts, and has in itself nothing to do with the ground-rent, which must be paid annually at stated dates for the use of the soil. In the second place it shows, that the capital incorporated in the soil ultimately passes into the hands of the landlord together with the land, and that the interest on it helps to swell his rent.

Some writers, either acting as spokesmen of landlordism against the attacks of bourgeois economists, or endeavoring to transform the capitalist system of production from a system of antagonisms into one of "harmonies," as did Carey, have tried to represent ground-rent, the specific economic expression of private property in land, as identical with interest. For this would obliterate the antagonism between landlords and capitalists. The opposite method was employed in the beginning of capitalist production. In those days landed property was still regarded by popular conception as the primitive and respectable form of private property, while interest on capital was decried as usury. Dudley North, Locke and others, therefore represented interest on capital as a form analogous with ground-rent, just as Turgot deduced the justification of interest from the existence of ground-rent.— Aside from the fact that ground-rent may, and does, exist in its pure form without any addition for interest on capital incorporated in the soil, these more recent writers also forget, that in this way the landlord does not only receive interest on the capital of other people that cost him nothing, but also pockets this capital of others without any compensating return. The justification of private property in land, like that of all other forms of property within a certain mode of production, is that the mode of production is itself a transient historical necessity, and this includes the conditions of production and exchange, which flow from it. It is true, as we shall see later, that property in land differs from the other

kinds of property by the fact that it appears superfluous, and even noxious, at a certain stage of development, even from the point of view of capitalist production.

In another form, ground-rent may be confounded with interest and its specific character overlooked. Ground-rent assumes the shape of a certain sum of money, which the landlord draws annually out of the lease of a certain piece of the globe. We have seen that every sum of money may be capitalised, that is, considered as the interest on an imaginary capital. For instance, if the average rate of interest is 5%, then an annual ground-rent of 200 pounds sterling may be regarded as the interest on a capital of 4,000 pounds sterling. Ground-rent so capitalised forms the purchase price or value of the land, a category which is on its face irrational, just as the price of labor is, since the earth is not the product of labor and therefore has no value. But on the other hand a real relation in production is concealed behind this irrational form. If a capitalist buys land yielding a rent of 200 pounds sterling annually and pays 4,000 pounds sterling for it, then he draws the average interest of 5% on his capital of 4,000 pounds sterling, just as though he had invested this capital in interest-bearing papers or loaned it directly at 5% interest. It is the utilisation of a capital of 4,000 pounds sterling at 5%. On this assumption he would recover the purchase price of his estate in twenty years by its revenues. In England, therefore, the purchase price of land is calculated on so many years' purchase, and this is merely a different expression for the capitalisation of the ground-rent. It is in fact the purchase price, not of the land, but of the ground-rent yielded by it, calculated on the ordinary rate of interest. But this capitalisation of rent has for its premise the existence of rent, for rent cannot be explained and derived from its own capitalisation. Its existence, independent of its sale, is rather the condition from which the inquiry must start.

It follows, then, that the price of land may rise or fall inversely as the rate of interest rises or falls, if we assume that ground-rent is a constant magnitude. If the ordinary rate of interest should fall from 5% to 4%, then the annual

ground-rent of 200 pounds sterling would represent the annual self-expansion of a capital of 5,000 pounds sterling instead of 4,000 pounds sterling. The price of the same piece of land would thus have risen from 4,000 to 5,000 pounds sterling, or from 20 years' to 25 years' purchase. The reverse would take place in the opposite case. This is a movement of the price of land, which is independent of the movement of ground-rent itself and regulated only by the rate of interest. But as we have seen that the rate of profit has a tendency to fall in the course of social progress, and that the rate of interest has the same tendency, so far as it is regulated by the rate of profit; and since, furthermore, the rate of interest has a tendency to fall in consequence of the growth of loanable capital, aside from the influence of the rate of profit, it follows that the price of land has a tendency to rise, even independently of the movement of ground-rent and the prices of the products of the soil, of which the rent forms a part.

The mistaking ground-rent for the interest form, which it assumes for the buyer of the land — a mistake due to a complete unfamiliarity with the nature of ground-rent — must lead to the most absurd conclusions. Since landed property is considered, in all old countries, as a particularly noble form of property, and its purchase also as an eminently safe investment of capital, the rate of interest at which ground-rent is bought is generally lower than that of other investments of capital for a long time, so that a buyer of real estate draws, for instance, only 4% on his purchase price, whereas he would draw 5% for the same capital in other investments. In other words, he pays more capital for the ground-rent than he would for the same amount of income in other investments. This leads Mr. Thiers to conclude in his utterly valueless work on *La Propriété* (a reprint of a speech of his made in 1849 against Proudhon in the French National Assembly) that ground-rent is low, while it proves merely that its purchase price is high.

The fact that capitalised ground-rent represents itself as the price or value of land, so that the earth is bought and sold like

any other commodity, serves to some apologists as a justification of private property in land, seeing that the buyer pays an equivalent for it the same as he does for other commodities, and that the major portion of property in land has changed hands in this way. The same reason would, in that case, serve also to justify slavery, since the returns from the labor of the slave, whom the slave holder has bought, represent merely the interest on the capital invested in this purchase. To derive from the sale and purchase of ground-rent a justification for its existence signifies to justify its existence by its existence.

It is very important for a scientific analysis of ground-rent, that is of the independent and specifically economic form of property in land on the basis of capitalist production, to study it in its pure form and free from all falsifying and obliterating by-work. And it is no less important for an understanding of the practical effects of property in land, even for a theoretical comprehension of a multitude of facts, which run counter to the conception and nature of ground-rent and yet appear as modes of existence of ground-rent, to know the elements which give rise to such obscurities in theory.

In practice everything appears naturally as ground-rent that is paid in the form of lease money by the tenant to the landlord for the permission of cultivating the soil. Whatever may be the composition of this tribute, whatever may be its sources, it has this in common with real ground-rent that the monopoly of the so-called owner of a piece of the globe enables him to levy such a tribute and impose such a tax. This tribute furthermore shares with the real ground-rent the fact that it determines the price of land, which, as we have indicated above, is nothing but the capitalised income from the lease of the land.

We have already seen, that the interest for the capital incorporated in the soil may form one of those foreign ingredients in ground-rent, an element which must become a continually growing addition to the total rent of a certain country

in proportion as economic development proceeds. But aside from this interest it is possible that the lease money may conceal a deduction from the average profit or from the normal wages, or both, being made up of them either in part or wholly, so that in some cases it may not represent any real ground-rent at all and the soil may be valueless. This portion of the profit, or of wages, appears then as ground-rent, because instead of falling normally into the hands of the industrial capitalist or the wage worker, it is paid to the landlord in the form of lease money. Economically speaking neither the one nor the other of these portions constitutes any ground-rent; but in practice they constitute some of the revenue of the landlord, an economic utilisation of his monopoly, just as real ground-rent does, and they have a determining influence on land prices just as ground-rent has.

We are not now speaking of conditions, in which ground-rent, the form of landed property adapted to the capitalist mode of production, formally exists without the capitalist mode of production itself, so that the tenant is not an industrial capitalist, nor the mode of his management a capitalist one. Such is the case in Ireland. The tenant is here generally a small farmer. What he pays to the landlord in the shape of rent absorbs frequently not merely a part of his profit, that is, of his own surplus-labor, to which he is entitled as the possessor of his own instruments of production, but also a part of his normal wages, which he would receive under different conditions for the same amount of labor. Besides, the landlord, who does not do anything for the improvement of the soil, also expropriates him from his small capital, which he incorporates for the greater part in the soil by his own labor, just as a usurer would do under similar circumstances. Only the usurer would at least risk his own capital in the operation. This continual robbery is the center of the disputes over the Irish Land Bill, which has for its principal aim to compel the landlord, when giving notice to his tenant to vacate, should pay him an indemnity for the improvements made by him in the soil, or for the capital in-

corporated by him in the land. Palmerston used to meet this demand with the cynical answer: "The House of Commons is a house of landlords."

Nor do we speak of exceptional circumstances, in which the landlord may enforce a high rent even in countries with a capitalist production, although this rent may not be in any way connected with the product of the soil. Of such a nature is the renting of small patches of ground to laborers in English factory districts, either for small gardens or for amateur agriculture in spare hours. (Reports of Inspectors of Factories.)

We are speaking of ground-rent in countries with a developed capitalist production. Among English tenants, for instance, there is a number of small capitalists, who are destined and compelled by education, training, tradition, competition, and other circumstances, to invest their capital as tenants in agriculture. They are compelled to be satisfied with less than the average profit, and to yield up a part of it to the landlords for rent. This is the only condition on which they are permitted to invest their capital in the soil, in agriculture. Since the landlords exert everywhere a considerable, in England even an overwhelming, influence on legislation, they are in a position to exploit this for the purpose of grinding down the entire class of tenants. The corn laws of 1815, for instance, a bread tax confessedly imposed upon the country for the purpose of securing for the idle landlords a continuation of their abnormally increased rentals during the anti-Jacobin wars, had indeed the effect, with the exception of a few extraordinarily rich years, of keeping the prices of agricultural products above the level which they could have held in free competition. But they did not have the effect of keeping prices at that level, which had been ordered by the law making landlords to serve as standard prices in such a way as to form the legal limit for the importation of foreign corn. But the leases were made out under the impression created by these normal prices. As soon as the illusion passed away, a new law was made, with new normal prices, which were as much an impotent expression of the greedy land-

lord's phantasy as the old ones. In this way the tenants were cheated from 1815 to the thirties. Hence we have during all this period the standing subject of agricultural distress. And with it we have during this period the expropriation and the ruin of a whole generation of tenants, and the appropriation of their places by a new class of capitalists.[123]

A much more general and important fact, however, is the depression of the wages of the actual farm laborers below their normal average, so that a portion of the wages is deducted in order to become a part of the lease money and thus flowing into the pockets of the landlord instead of the laborer under the disguise of ground-rent. This is the case quite generally in England and Scotland, with the exception of a few favorably situated counties. The inquiries of the Parliamentarian Committees into the scale of wages made before the passing of the corn laws in England — so far the most valuable and almost unexploited contributions to a history of wages in the 19th century, and at the same time a monument of disgrace erected for themselves by the English aristocracy and bourgeoisie — proved convincingly and beyond a doubt that the high rates of rent and the corresponding raise in the land prices during the anti-Jacobin wars, were due in part to no other cause but the deductions from wages and the depression of wages even below the physical minimum. In other words, a part of the wages had been paid over to the landlords. Various circumstances such as the depreciation of money, the handling of the poor laws in the agricultural districts, etc., had made these operations possible, at a time when the incomes of the tenants were rising enormously and the landlords amassed fabulous riches. Yes, one of the main arguments for the introduction of the corn laws, used by both tenants and landlords, was that it was physically impossible to depress the wages of the farm laborers still more. This condition of

[123] See the anti-corn law prize essays. However, the corn laws always kept prices at an artificially higher level. For the better situated tenants this was favorable. They profited by the stationary condition, in which the protective duties kept the great mass of tenants, who relied with or without reason on the exceptional average price.

things has not been materially altered, and in England as well as in all European countries a portion of the normal wages is absorbed by the ground-rent the same as ever. When Count Shaftsbury, then Lord Ashley, one of the philanthropic aristocrats, was so extraordinarily moved by the condition of the English factory laborers and acted as their spokesman in Parliament during the agitation for a ten hour day, the spokesmen of the industrials got their revenge by publishing statistics on the wages of the agricultural laborers in the villages belonging to him (see Volume I, chapter XXV, 5e, *The British Agricultural Proletariat*), which showed clearly, that a portion of the ground-rent of this philanthropist consisted of the loot, which his agents filched for him out of the wages of the agricultural laborers. This publication is also interesting for the reason, that the facts exposed by it may rank in the same class with the worst exposures made by the Committees in 1814 and 1815. As soon as circumstances permit of a temporary raise in the wages of the agricultural laborers, a cry goes up from the capitalist tenants to the effect that a raising of the wages to their normal level, as customary in other lines of industry, would be impossible and would ruin them, unless ground-rent were reduced at the same time. This is a confession, that the tenants deduct a portion from the wages of the laborers under the name of ground-rent and pay it over to the landlords. For instance, from 1849 to 1859 the wages of the agricultural laborers rose in England through a combination of overwhelming circumstances, such as the exodus from Ireland, which cut off the supply of agricultural laborers coming from that country; an extraordinary absorption of the agricultural population by the factories; a demand for soldiers to go to war; an exceptional emigration to Australia and the United States (California), and other causes which need not be mentioned here. At the same time the average prices of grain fell by more than 16% during this period, with the exception of the poor agricultural years from 1854 to 1856. The tenant capitalists shouted for a reduction of their rents. They succeeded in single cases. But on the whole they failed to get what they wanted. They

sought refuge in a reduction of the cost of production, among other things by introducing steam engines and new machinery in abundance, which partly replaced horses and crowded them out of the business, but partly also created an artificial overpopulation by throwing agricultural laborers out of work and thereby causing a fall in wages. And this took place in spite of the general relative decrease of the agricultural population during that decade, compared to the growth of the total population, and in spite of the absolute decrease of the agricultural population in some purely agricultural districts.[124] In the same way Fawcett, then professor of political economy at Cambridge, who died in 1884 as Postmaster General, said at the Social Science Congress, October 12, 1865: "The agricultural laborers began to emigrate and the tenants began to complain, that they would not be able to pay such high rents as they had been accustomed to pay, because labor became dearer in consequence of emigration." Here, then, the high ground-rent is directly identified with low wages. And so far as the level of the prices of land is determined by this circumstance increasing the rent, a rise in the value of the land is identical with a depreciation of labor, a high price of land with a low price of labor.

The same is true of France. "The price of rent rises, because the prices of bread, wine, meat, vegetables and fruit rise on the one side, while on the other the price of labor remains unchanged. If the older people compare the bills of their fathers, taking us back about 100 years, they will find that the price of one day's labor was then the same in rural France as it is now. The price of meat has trebled since them. . . . Who is the victim of this revolution? Is it the rich, who is the proprietor of the estate, or the poor who works it? . . . The raising of the prices of rent is the proof of a national disaster." (*Du Mécanisme de la Société en France et en Angleterre.* Par M. Rubichon, Second edition, Paris, 1837, p. 101.)

We now give some illustrations of rent representing deduc-

[124] John C. Morton, *The Forces Used in Agriculture.* Lecture in the London Society of Arts, 1860, based upon authentic documents, collected by about 100 tenants from 12 Scotch and 35 English counties.

tions either from the average profit or from the average wages.

The above quoted Morton, real estate agent and agricultural engineer, says that the observation has been made in many localities that the rent for large estates is smaller than for small ones, because "competition for the latter is generally greater than for the former, and because small tenants, who are rarely able to take up any other business but farming, are frequently willing to pay a rent, which they themselves know to be too high, pressed by the want of finding some other business." (John C. Morton, *The Resources of Estates.* London, 1858, p. 116.)

However, he is of the opinion that this difference is gradually disappearing in England, and he attributes this largely to the emigration of the class of small tenants. The same Morton gives an illustration, in which evidently the wages of the tenant himself, and still more surely of the laborers, suffer a deduction for ground-rent. This takes place in the case of estates of 70 to 80 acres, who cannot keep a two-horse plow. "Unless the tenant works as diligently with his own hands as any laborer, he cannot make out on his lease. If he leaves the execution of the work to his men and confines himself to superintending them, he will most likely find very quickly that he is unable to pay his rent." (L. c., p. 118.) Morton concludes, therefore, that unless the tenants of a certain locality are very poor, the leaseholds should not be smaller than 70 acres, so that the tenants may keep two or three horses.

Extraordinary wisdom of Monsieur Léonce de Lavergne, *Membre de l'Institut et de la Société Centrale d'Agriculture.* In his *Economie Rurale de l'Angleterre* (quoted from the English translation, London, 1855), he makes the following comparison of the annual advantages from cattle, that work in France but not in England, where they are replaced by horses (p. 42):

FRANCE		ENGLAND	
Milk	4 million p.st.	Milk	16 million p.st.
Meat	16 million p.st.	Meat	20 million p.st.
Labor	8 million p.st.	Labor	——
	28 million p.st.		36 million p.st.

But the higher amount for England is obtained here, according to his own statement, because milk is twice as dear in England than in France, while he counts the same prices for meat in both countries (p. 35); therefore the English milk product reduces itself to 8 million pounds sterling, and the total product to 28 million pounds sterling, the same as in France. It is indeed a strong dose, that Mr. Lavergne lumps the quantities and price differences together in his calculation, when England produces certain articles more expensively than France, so that this appears as an advantage of English agriculture, whereas it signifies at best only a higher profit for tenants and landlords.

That Mr. Lavergne is not only familiar with the advantages of English agriculture, but also believes in the prejudices of the English tenants and landlords, is proved by him on page 48: "One great disadvantage is generally connected with grain plants . . . they exhaust the soil that bears them." Mr. Lavergne believes not only that other plants do not do so, but he also believes that leguminous crops and root crops enrich the soil: "Leguminous plants draw the principal elements of their growth out of the air, while they give back to the soil more than they take from it; therefore they help both directly and indirectly through their return in the shape of animal manure to make good in a double way the damage caused by grain crops and other exhausting crops; hence it is a matter of principle that they should at least alternate with such crops; in this consists the Norfolk rotation." (Pages 50 and 51.)

No wonder that Mr. Lavergne, who believes these fairy tales of the English rural mind, also believes that the wages of the English farm laborers have lost their abnormality since the repeal of the corn tax. See what we have said on this point in another place, Volume I, chapter XXV, 5c, pages 739 to 766. But let us also listen to Mr. John Bright's speech in Birmingham, December 14, 1865. After mentioning the 5 million families that are not represented in Parliament, he continues: "Among these are one million, or rather more than one million in the United Kingdom, who

are put down on the luckless list of paupers. Then there is still another million, who are holding themselves just above pauperism, but who are continually in danger of likewise becoming paupers. Their condition and prospects are not any better. Now take a look at the ignorant lower strata of this portion of society. Consider their outcast condition, their poverty, their complete hopelessness. Even in the United States, even in the southern states during the reign of slavery, every negro looked forward to some jubilee year. But these people, this mass of the lowest strata of our country, I am here to express it, have neither the faith in any improvement nor even a longing for it. Did you read the other day that item about John Cross, a farm laborer of Dorsetshire? He worked six days in the week, had an excellent character from his employer, for whom he had worked 24 years for a weekly wage of 8 sh. John Cross had to keep a family of seven children in his hut out of this wage. In order to warm his sickly wife and her suckling babe, he took, or legally speaking he stole, a wooden hurdle worth six pence. For this crime he was sentenced to 14 or 20 days' imprisonment by the justices of the peace. I can tell you that many thousands of cases like that of John Cross may be found in the whole country, and particularly in the South, and that their condition is such, that so far the most sincere investigator has not been able to solve the secret, how they keep body and soul together. And now throw your glances over the whole country and look at those 5 million families and the desperate condition of this stratum of them. Can we not say truly that the mass of the nation excluded from the suffrage toils and toils again and knows almost no rest? Compare them with the ruling class — but if I do that I shall be accused of communism . . . but compare this great toiling and suffrageless nation with that part which may be regarded as the ruling class. Look at their wealth, their showiness, their luxury. Look at their weariness — for there is a weariness also among them, but it is the weariness of satiety — and see how they hasten from place to place, as though it

were only a question of discovering new pleasures." (*Morning Star,* December 15, 1865.)

We will show hereafter, in what manner surplus-labor, and consequently surplus-products, are confounded with ground-rent, which is, at least under the capitalist mode of production, qualitatively and quantitatively a specifically determined part of the surplus-product. The natural basis of surplus-labor in general, that is a natural condition without which such labor cannot be performed, is that nature must supply, either in animal or vegetable products of the soil or in fisheries, etc., the necessary means of subsistence by an expenditure of labor which does not consume the entire working day. This natural productivity of agricultural labor (which implies here the labor of gathering, hunting, fishing, cattle raising) is the basis of all surplus-labor; so is all labor primarily and originally directed toward the appropriation and production of food. (The animal supplies at the same time skins for warmth in colder climates; also cave dwellers, etc.)

The same confusion between surplus-product and ground-rent, differently expressed, is shown by Mr. Dove. Originally agricultural and industrial labor are not separated. The second joins into the first. The surplus-labor and the surplus-product of the farming tribe, the house commune or family, comprise both agricultural and industrial labor. Both go hand in hand. Hunting, fishing, agriculture are impossible without suitable tools. Weaving, spinning, etc., were first carried on as side occupations to farming.

We have shown previously, that in the same way in which the labor of the individual workman may be separated into necessary and surplus-labor, the aggregate labor of the working class may be divided so that that portion, which produces the total means of subsistence for the working class (including the means of production required for this purpose) performs the necessary labor for the whole society. The labor performed by all the remainder of the working class may then be regarded as surplus-labor. But the necessary includes by no means only agricultural labor, but also that labor which

produces all other products that necessarily pass into the average consumption of the laborer. Socially speaking, some perform only necessary, others only surplus-labor, and vice versa. It is but a division of labor between them. It is the same with the division of labor between agricultural and industrial laborers in general. The purely industrial character of labor on the one side is offset by the purely agricultural one on the other. This purely agricultural labor is by no means natural, but is rather a product, and a very modern one at that, which has not yet been acquired everywhere, of social development, and it corresponds to a very definite stage of development. Just as a portion of the agricultural labor is materialised in products, which either minister only to luxury or serve as raw materials in industry, but do not serve as food, particularly not as food for the masses, so a portion of the industrial labor is materialised in products, which serve as necessary means of consumption of both the agricultural and industrial laborers. It is a mistake to consider this industrial labor, from a social point of view, as surplus-labor. It is in part as much necessary labor as the necessary portion of the agricultural labor. It is likewise but a separated form of a part of industrial labor which was formerly naturally connected with agricultural labor, it is a necessary and mutual supplement to the purely agricultural labor, which is now separated from it. (From a purely material point of view 500 mechanical weavers may produce surplus-fabrics to a far greater degree, that is, more than is required for their own clothing.)

It should finally be remembered in the study of the various forms which appear as ground-rent, that is, of the lease money paid under the name of ground-rent to the landlord for the use of the land for the purposes of production or consumption, that the price of things, which have in themselves no value, not being the products of labor, such as the land, or which at least cannot be reproduced by labor, such as antiquities, works of art of certain masters, etc., may be determined by many accidental combinations. In order to sell a thing,

nothing more is required than that it can be monopolised and alienated.

There are three great errors, which should be avoided in the study of ground-rent, and which obscure its analysis.

1) Confusion of the various forms of rent, which correspond to different stages of development of the process of social production.

Whatever may be the specific form of rent, all types of it have this in common that the appropriation of rent is that economic form, in which property in land realises itself, and that ground-rent on its part is conditioned on the existence of private property in land, the ownership of certain portions of the globe by certain individuals. The owner may be the individual representing the community, as in Asia, Egypt, etc., or this private ownership in land may be merely accessory to the ownership of the persons of the direct producers by some individuals, as under the slave or serf system, or it may be a purely private ownership of nature by nonproducers, a mere title to land, or finally it may be a relation to the soil which, as in the case of colonists and small peasants owning land, seems included under a system of isolated and unsocial labor in the appropriation and production of the products of certain pieces of land by the direct producers.

This common element in the various forms of rent, namely that of being the economic realisation of property in land, a legal fiction by grace of which certain individuals have an exclusive right to certain pieces of the globe, misleads into overlooking the differences.

2) All ground-rent is surplus-value, the product of surplus-labor. In its undeveloped form, as natural rent (rent in kind), it is as yet directly the surplus-product itself. This gives rise to the mistaken idea that the rent corresponding to the capitalist mode of production is explained by merely explaining the general prerequisites of surplus-value and profit, whereas this ground-rent is always a surplus over and

above profit. It is a peculiar and specific portion of surplus-value, over and above that portion of the value of commodities, which is known as profit and consists itself of surplus-value (surplus-labor). The general conditions for the existence of surplus-value and profit are: The direct producers must work beyond the time necessary for the reproduction of their own labor-power. They must perform surplus labor in general. This is the subjective condition. The objective condition is that they must be able to perform surplus-labor. The natural conditions must be such that a part of their available labor time suffices for their reproduction and selfmaintenance as producers, that the production of their necessary means of subsistence shall not consume their whole labor-power. The fertility of nature forms a limit here, a starting point, a basis. The development of the social productivity of their labor forms the other limit. Still more strictly speaking, since the production of means of subsistence is the very first condition of their existence and of all production, the labor used in this production, that is the agricultural labor in the widest economic meaning, must be productive enough, so that it will not absorb the entire available labor time in the production of means of subsistence for the direct producers. Agricultural surplus-labor and an agricultural surplus-product must be possible. More widely applied, it means that the total agricultural labor, both necessary and surplus-labor, of a part of society suffices to produce the necessary subsistence for the whole society, including the laborers who are not agricultural. It means that this great division of labor between farmers and industrials must be possible, also that between farmers producing subsistence and farmers producing raw materials. Although the labor of the producers of subsistence consists of necessary and surplus-labor, so far as their own point of view goes, it represents from the social standpoint only the labor necessary to produce the social subsistence. The same takes place in the case of division of labor within society as a whole, as distinguished from division of labor in the individual workshop. It is the labor necessary for the production of particular articles, for the satisfaction of some partic-

ular need of society. If this division is proportional, then the products of the various groups are sold at their values (at a later stage of development at their prices of production), or at prices which are modifications of their values or prices of production due to general laws. It is indeed the law of value enforcing itself, not with reference to individual commodities or articles, but to the total products of the particular social spheres of production made independent by division of labor. Every commodity must contain the necessary quantity of labor, and at the same time only the proportional quantity of the total social labor time must have been spent on the various groups. For the use-value of things remains a prerequisite. The use-value of the individual commodities depends on the particular need which each satisfies. But the use-value of the social mass of products depends on the extent to which it satisfies in quantity a definite social need for every particular kind of product in an adequate manner, so that the labor is proportionately distributed among the different spheres in keeping with these social needs, which are definite in quantity. (This point is to be noted in the distribution of capital to the various spheres of production.) The social need, that is the use-value on a social scale, appears here as a determining factor for the amount of social labor which is to be supplied by the various particular spheres. But it is only the same law, which showed itself in the individual commodity, namely that its use-value is the basis of its exchange-value and thus of its surplus-value. This point has any bearing upon the proportion between necessary and surplus-labor only in so far as a violation of this proportion makes it impossible to realise the value of the commodities and the surplus-value contained in it. For instance, take it that proportionally too much cotton goods have been produced, although only the labor-time necessary for this total product under the prevailing conditions is realised in it. But too much social labor has been expended in this particular line, in other words, a portion of this product is useless. The whole of it is therefore sold only as though it had been produced in the necessary proportion. This quantitative

limit of the quota of social labor available for the various particular spheres is but a wider expression of the law of value, although the necessary labor time assumes a different meaning here. Only just so much of it is required for the satisfaction of the social needs. The limitation is here due to the use-value. Society can use only so much of its total labor for this particular kind of products under the prevailing conditions of production. But the subjective and objective conditions of surplus-labor and surplus-value in general have nothing to do with the peculiar form of either the profit or the rent. These conditions apply to surplus-value as such, no matter what special form it may assume. Hence they do not explain ground-rent.

3) It is precisely the self-expansion of private property, the development of ground-rent, which reveals the characteristic peculiarity, that its amount is by no means determined by the actions of its recipient, but by the independent development of social labor, in which he does not take part. It may easily happen, therefore, that something is regarded as a peculiarity of rent (and of the products of agriculture in general), which is really a common feature of all lines of production and all their products on the basis of the production of commodities, or, more strictly speaking, of capitalist production.

The amount of ground-rent (and with it the value of the soil) develops with the progress of social advance as a result of the total labor of society. On the one hand this leads to a growth of the market and of the demand for products of the soil, on the other it stimulates the demand for the land itself, which is a prerequisite of competitive production in all lines of business, even in those which are not agricultural. Speaking strictly of real-ground rent, this rent, and with it the value of the soil, develops with the market for the products of the soil, and thus with the increase of the other than agricultural population, with its needs and demand for either means of subsistence or raw materials. It is the nature of capitalist production to reduce the agricultural population continually as compared to the non-agricultural, because in

industry (strictly speaking) the increase of the constant capital compared to the variable capital goes hand in hand with an absolute increase, though relative decrease, of the variable capital; whereas in agriculture the variable capital required for the exploitation of a certain piece of land decreases absolutely and cannot increase, unless new land is taken into cultivation, which implies a still greater previous growth of the non-agricultural population.

In fact we are not dealing here with a characteristic peculiarity of agriculture and its products. On the contrary, the same applies to all other lines of production and products on the basis of a prodution of commodities and of its absolute form, capitalist production.

These products are commodities, use-values, which have an exchange-value which can be realised, converted into money, only to the extent that other commodities form an equivalent for them, that other products face them as commodities and values. They have an exchange-value to the extent that they are not produced as immediate means of subsistence for the producers themselves, but as commodities, as products which become use-values only by their conversion into exchange-values (money), by being gotten rid of. The market for these commodities develops through the social division of labor; the separation of the productive labor into various departments transforms their respective products mutually into commodities, into mutual equivalents, makes them serve mutually as markets. This is in no way peculiar to agricultural products.

Rent can develop as money-rent only on the basis of a production of commodities, more strictly of capitalist production, and it so develops in proportion as the agricultural production becomes a production of commodities. This is the same proportion in which other than agricultural lines of production develop independently of agriculture, for to that extent does the agricultural product become a commodity, an exchange-value, a value. To the same extent that the production of commodities develops as a capitalist production, and as a production of value, does the production of

surplus-value and surplus-products proceed. But to the same extent that this continues does property in land acquire the faculty of capturing an ever increasing portion of this surplus-value by means of its land monopoly. Thereby it raises its rent and the price of the land itself. The capitalist performs at least an active function himself in the development of surplus-value and surplus-products. But the land owner has but to capture his growing share in the surplus-product and the surplus-value created without his assistance. It is this which is the characteristic peculiarity of his position, and not the fact that the value of the products of the soil and thus of the land increases in proportion as the market for them expands, the demand grows and with it the world of commodities which are not agricultural products, the mass of producers and products outside of agriculture. But as this is done without the assistance of the landowner, it appears as something specifically his own, that measures of value, measures of surplus-value, and the conversion of a portion of surplus-value into ground-rent should depend upon the process of social production, on the development of the production of the commodities in general. For this reason a man like Dove wants to develop rent out of this element. He says that rent does not depend upon the mass of agricultural products, but upon their value; but this depends upon the mass and productivity of the non-agricultural population. But it is also true of all other products that they cannot develop the character of commodities, unless the mass, the variety and the succession of other commodities form equivalents for them. We have shown this previously in the discussion of the general nature of value. On the one hand the exchangeability of a certain product depends altogether on the multiplicity of commodities existing outside of it. On the other hand this circumstance determines in particular to what extent this product shall be put out as a commodity.

No producer, whether an industrial or farmer, considered by himself alone, produces value or commodities. His product becomes a commodity only in definite social interrelations. It becomes a commodity, in the first place, to the

extent that it represents social labor, so that the individual producer's labor counts as a part of the general social labor. And in the second place this social character of his labor appears impressed upon his product through its pecuniary character and through its general exchangeability determined by its price.

Instead of explaining rent, such vagaries confine themselves to explaining merely surplus-value in general, or, still more absurdly, surplus-products in general, and on the other hand they make the mistake of ascribing a character, which belongs to all products in their capacity as commodities, to agricultural products exclusively. This is still more vulgarised by those who pass from a general analysis of value over to the realisation of a certain commodity's value. Every commodity can realise its value only in the process of circulation, and whether it realises its value, and to what extent it does so, depends on the prevailing market conditions.

It is not a peculiarity of ground-rent, then, that the products of agriculture develop into values and as values, that they face other commodities as commodities, and that products not agricultural face them as commodities, or that they develop as specific expressions of social labor. The peculiarity of ground-rent is rather that in proportion as the conditions develop, in which agricultural products develop as commodities (values), and in which they can realise their values, so does also property in land develop the power to appropriate an increasing portion of these values, which were created without its assistance, and so does an increasing portion of the surplus-value assume the form of ground-rent.

CHAPTER XXXVIII.

DIFFERENTIAL RENT. GENERAL REMARKS.

In the analysis of ground-rent we shall start from the assumption, that products paying such a rent, that is, products a portion of whose surplus-value and general price re-

solves itself into ground-rent, are sold at their prices of production, like all other commodities. It suffices for our purposes to confine ourselves to products of agriculture and mining. In other words, their selling prices are made up of the elements of their cost (the value of the consumed constant and variable capital) plus a profit, which is determined by the average rate of profit and calculated on the total capital advanced, whether consumed or not consumed. We assume, then, that the average selling prices of these products are equal to their prices of production. The question is now, how can a ground-rent develop under these conditions, how can a portion of the profit become converted into ground-rent, so that a portion of the prices of the commodities falls into the hands of the landlord.

In order to show the general character of this form of ground-rent, we assume that most of the factories of a certain country are driven by steam engines, while a certain smaller number of them are driven by natural waterfalls. Let us further assume that the price of production in those industries amounts to 115 for a quantity of commodities which have consumed a capital of 100. The 15% of profit are calculated, not merely on the consumed capital of 100, but on the total capital invested in the production of this value in the commodities. We have previously shown that this price of production is not determined by the individual cost-price of every single producing industrial, but by the cost-price required on an average for the commodity under the average conditions of capital in the entire sphere of production. It is, in fact, the market price of production, as distinguished from its oscillations. For it is in the form of the market price, and in a wider sense of the regulating market price, or market price of production, that the nature of value asserts itself in commodities. It becomes evident, in this way, that it is not determined by the labor time necessary in the case of any individual producer for the production of a certain quantity of commodities, or of some individual commodity, but by the socially necessary labor time. This is that quantity of labor time, which is necessary for

the production of the socially required total quantity of commodities of any kind on the market under the existing average conditions of social production.

As definite figures are immaterial in this case, we shall furthermore assume that the cost price in the factories driven by water power is only 90 instead of 100. Since the regulating market price of production of this quantity of commodities is 115, with a profit of 15%, the factories driven by water power will also sell their commodities at 115, the average price regulating the market price. Their profit would then be 25 instead of 15; the regulating market price of production would allow them a surplus-profit of 10%, not because they sell their commodities above the price of production, but because they sell them at the price of production, because their commodities are produced, or their capital expanded, under exceptionally favorable conditions, under conditions, which are above the average prevailing in this sphere.

Two things become evident at once.

1) The surplus-profit of the producers, who use the natural waterfall as motive power, is in the same class with all surplus-profit (and we have already analysed this category when discussing the prices of production), which is not the result of mere transactions in the sphere of circulation, of mere fluctuations of market prices. This surplus-profit, then, is likewise equal to the difference between the individual price of production of these favored producers and the general social price of production regulating the market in this entire sphere. This difference is equal to the excess of the general price of production of the commodities over their individual price of production. The two regulating limits of this excess are on the one hand the individual cost price, and thus the individual price of production, on the other hand the general price of production. The value of the commodities produced with water power is smaller, because a smaller quantity of labor is required for their production, namely less labor materialised in the constant capital. The labor here employed is more productive, its individual power of production is greater than that employed in the majority of the

factories of the same kind. Its greater productive power is shown in the fact that it requires a smaller quantity of constant capital, a smaller quantity of materialised labor, than the others. It also requires less living labor, because the water wheel need not be heated. This greater individual power of production of the employed labor reduces the value, and at the same time the cost price and price of production of the commodity. For the individual industrial capitalist this expresses itself in a lower cost price of his commodities. He has to pay for less materialised labor, and less wages for less labor-power employed. Since the cost price of his commodities is smaller, his individual price of production is also smaller. His cost price is 90 instead of 100. His individual price of production would therefore be only $103\frac{1}{2}$ instead of 115 ($100 : 115 = 90 : 103\frac{1}{2}$). The difference between his individual price of production and the general one is limited by the difference between his individual cost price and the general one. This is one of the magnitudes which form the limits of his surplus-product. The other is the magnitude of the general price of production, into which the average rate of profit enters as a regulating factor. If coal should become cheaper, the difference between his individual cost-price and the general cost-price would decrease, and with it his surplus-profit. If he should be compelled to sell his commodities at their individual value, or at the price of production determined by its individual value, then the difference would disappear. It is on the one side a result of the fact that the commodities are sold at their general market-price, the price brought about by the equalisation of individual prices through competition, on the other side a result of the fact that the greater individual productivity of the laborers employed by him does not benefit the laborers, but their employer, as does all productivity of labor. This productivity represents itself as a faculty of capital.

Since the level of the general price of production is one of the limits of the surplus-product, the level of the average rate of profit being one of its factors, it can have no other source but the difference between the general and the indi-

vidual price of production, and consequently the difference between the general and the individual rate of profit. An excess of this difference would imply the sale of products above the price of production regulated by the market, not at this price.

2) So far as the surplus profit of the manufacturer using natural water power instead of steam for motive power does not differ in any way from any other surplus profit. All normal surplus profit, that is all surplus profit not due through accidental sales or fluctuations of the market price, is determined by the difference between the individual price of production of the commodities of these particular capitals and the general price of production, which regulates in a general way the market prices of the commodities produced by the capitals of this sphere of production, or the market prices of the commodities of the total capital invested in this sphere of production.

But now we come to the difference.

To what circumstance does the industrial capitalist in the present case owe his surplus-profit, the surplus resulting for him personally from the price of production regulated by the average rate of profit?

He owes it in the last resort to a natural power, the motive power of water, which is found ready at hand in nature and which is not itself a product of labor like coal, which transforms water into steam. The water has no value, it need not be paid by an equivalent, it costs nothing. It is a natural agency of production, which is not produced by labor.

But this is not all. The manufacturer who works with a steam engine also employs natural powers, which cost him nothing and yet make his labor more productive and, to the extent that they cheapen the manufacture of the means of subsistence required for the laborers, increase the surplus-value and with it the profit. These natural powers are quite as much monopolised by capital as the natural powers of social labor arising from co-operation, division, etc. The manufacturer pays for the coal, but not for the faculty of

the water to alter its aggregate state, of passing over into steam, not for the elasticity of the steam, etc. The monopolisation of natural powers, that is of the increased productivity of labor due to them, is common to all capital working with steam engines. It may increase that portion of the product of labor which represents surplus-value as against that portion which is converted into wages. To the extent that it does this, it raises the general rate of profit, but it does not make any surplus-profit, for this consists of the excess of the individual profit over the average profit. The fact that the application of a natural power, of a waterfall, creates a surplus-profit in this case, cannot therefore be due solely to the circumstance that the increased productivity of labor is here due to a natural force. There must be still other modifying circumstances.

Look at the reverse side. The mere application of natural powers to industry may influence the level of the general rate of profit, because it affects the quantity of labor necessary to produce the means of subsistence. But in itself it does not create any deviations from the general rate of profit, and this is the point in which we are interested here. Furthermore, the surplus-profit, which some individual capital may ordinarily realise in its particular sphere of production — for the deviations of the rates of profits in the various spheres of production are continually balanced by competition into an average rate — are due, aside from accidental deviations, to a reduction of the cost-price, of the cost of production. This reduction arises either from the fact that a capital is used in greater than ordinary quantities, so that the dead expenses of the production are reduced, while the general causes increasing the productivity of labor, such as co-operation, division, etc., can exert themselves with a higher degree of intensity, their field of expression being larger. Or it may arise from the fact that, aside from the greater volume of the invested capital, better methods of labor, new inventions, improved machinery, chemical secrets in manufacture, etc., in short new and improved means of production and methods are used, which are above the average. The

reduction of the cost price and the surplus profit arising from it arise here from the manner, in which the self-expanding capital is invested. They arise either from the circumstance that it is concentrated in one hand in extraordinarily large masses (a circumstance which is neutralised when capitals of the same size become the average), or from the circumstance that a capital of a certain size expands itself under exceptionally favorable circumstances (a circumstance which is neutralised as soon as the exceptional method of production becomes general or is superseded by a still more developed one).

The cause of the surplus profit, then, arises here from the capital itself (which includes the labor set in motion by it); it is either due to the greater size of the capital employed, or to its more improved application; and there is no particular reason why all the capital in the same sphere of production should not be invested in the same way. In fact, the competition between the capitals tends to neutralise their differences more and more. The determination of value by the socially necessary labor time asserts itself by the cheapening of commodities and the necessity of making commodities under the same favorable conditions. But it is different with the surplus profit of the industrial capitalist who uses water power. The increased productive power of his labor is not due either to his capital or his labor, nor to the mere application of some natural force separate from capital and labor, but incorporated in the capital. It arises from the greater natural power of production of labor in conjunction with some other natural power, which natural power is not at the command of all capitals in this sphere, whereas such a thing as the elasticity of steam is. The application of this other natural power does not follow as a selfunderstood matter, whenever capital is invested in this sphere. It is a monopolised natural power, which, like a water fall, is only at the command of those who can avail themselves of particular pieces of the globe and its opportunities. It is not within the power of capital to call to life this natural premise for a greater productivity of labor, whereas any capital may

transform water into steam. Water power is found only locally in nature, and wherever it does not exist, it cannot be created by any investment of capital. It is not dependent upon products which labor can secure, such as machines, coal, etc. It is dependent upon definite natural conditions of definite portions of the globe. That section of industrial capitalists who own waterfalls excludes the other section who do not own any from the application of this power, because the land, and particularly land supplied with water power, is limited. Of course this does not prevent the quantity of water power available for industrial purposes from being increased, even if the number of natural waterfalls in a certain country is limited. Water power may be artificially diverted, in order to exploit its motive force fully. Under certain conditions a water wheel may be improved so as to use the highest possible amount of water power; in places where the ordinary wheel is not suitable for supplying water, turbines may be used, etc. The possession of this natural power forms a monopoly in the hand of its owner, it is a premise for the increase of the productivity of the invested capital, which cannot be created by the process of production of the capital itself.[125] This natural power, which can be monopolised in this way, is always attached to the soil. Such a natural power does not belong to the general conditions of that particular sphere of production, and not to those conditions, which may be made general.

Now let us assume that the waterfalls with the land on which they are found are held in the hands of persons, who are considered the owners of these portions of the globe, who are land owners. These owners may exclude others and prevent them from investing capital in the waterfalls or using waterfalls by means of capital. They can permit such a use or forbid it. The capital cannot create a waterfall out of itself. Therefore the surplus profit, which arises from this employment of waterfall, is not due to capital, but to the harnessing of a natural power, which can be monopolised and has been monopolised, by capital. Under these circum-

[125] As to the extra profit, see the "Inquiry" (against Malthus).

stances the surplus-profit is transformed into ground-rent, that is, it falls into the hands of the owner of the waterfall. If the industrial capitalist pays to the owner of the waterfall 10 pounds sterling annually, then his profit is 15 pounds sterling, that is 15% on the 100 which then make up his cost of production; and he is just as well off, or possibly better, as all other capitalists of his sphere of production, who work with steam. It would not matter, if this capitalist should be the owner of the waterfall. He would in that case pocket the surplus profit of 10 pounds in his capacity as a landowner, not in his capacity as an industrial capitalist, just because this surplus is not due to his capital as such, but to a limited natural power separate from his capital, over which he has command, because he has a monopoly of it. And so it is converted into ground-rent.

1) It is evident that this is always a differential rent, for it does not enter as a determining factor into the average price of production of commodities, but rather is based on it. It always arises from the difference between the individual price of production of the individual capital having command over monopoly of natural power and the general price of production of the total capital invested in that particular sphere of production.

2) This ground-rent does not arise from the absolute increase of the productivity of the employed capital, or of the labor appropriated by it, since this can only reduce the value of commodities; it is due to the greater relative fertility of definite individual capitals invested in a certain sphere of production, as compared with investments of capital, which are excluded from these exceptional and natural conditions favoring the productivity. For instance, if the use of steam should offer overwhelming advantages not attached to the use of water power, or tending to neutralise the benefits to be derived from water power, then, water power would not be used and could not produce any surplus profit, or ground-rent, even though coal has a value and water power has not.

3) The natural power is not the source of the surplus profit, but only its natural basis, because this natural basis

permits an increase in the productive power of labor. In the same way the use-value is the general bearer of the exchange-value, but not its cause. If the same use-value could be created without labor, it would have no exchange-value, yet it would have the same useful effect as ever. On the other hand, nothing can have an exchange-value unless it has a use-value, unless it has this useful bearer of labor. Were it not for the fact that the different values are neutralised into prices of production, and the different individual prices of production into one average price of production regulating the market, the mere increase in the productivity of labor by the use of a waterfall would merely lower the price of the commodities produced with the waterfall, without adding anything to the share of profit contained in those commodities. On the other hand, this increased productivity of labor would not be converted into surplus-value, were it not for the fact that capital appropriates the natural and social productivity of labor as though it were its own.

4) The private ownership of the waterfall has nothing to do with the creation of that portion of the surplus-value (profit), and of the price of a commodity in general, which is produced by the help of the waterfall. This surplus profit would also exist, if private property did not prevail, for instance, if the land supplied with the waterfall were appropriated by the industrial capitalist as masterless booty. Hence private property in land does not create that portion of value, which is transformed into surplus profit, but it merely enables the landowner, who has possession of the waterfall, to coax this surplus profit out of the pocket of the industrial capitalist into his own. It is the cause, not of the creation of this surplus profit, but of its transformation into ground-rent, of the appropriation of this portion of the profit, or of the price of commodities, by the owner of the land or of the waterfall.

5) It is evident that the price of the waterfall, that is the price which the owner of it would receive if he were to sell it to some other man, perhaps to the industrial capitalist, would not enter directly into the general price of production

of the commodities, although it would enter into the individual cost-price of the industrial capitalist. For the rent arises here from the price of production of the commodities produced by steam machinery, and this price is regulated independently of the waterfall. Furthermore, this price of the waterfall is an irrational expression, behind which a real economic relation is concerned. The waterfall, like the earth in general, and like any natural force, has no value, because it does not represent any materialised labor, and therefore it really has no price, which is normally but the expression of value in money. Where there is no value, it is obvious that it cannot be expressed in money. This price is merely capitalised rent. The ownership of land enables the landowner to catch the difference between the individual profit and the average profit. The profit thus acquired, which is renewed every year, may be capitalised, and then it appears as the price of a natural power itself. If the surplus profit realised by the use of the waterfall amounts to 10 pounds sterling per year, and the average interest is 5%, then these 10 pounds sterling annually represent the interest on a capital of 200 pounds sterling; and this capitalisation of the annual 10 pounds sterling, which the waterfall enables its owner to catch, appears then as the capital-value of the waterfall itself. That it is not the waterfall itself, which has a value, but that its price is a mere reflex of the appropriated surplus profit, which the use of the waterfall yields to the industrial capitalist, capitalistically calculated, becomes at once evident in the fact that the price of 200 pounds sterling represents merely the product of a surplus profit of 10 pounds sterling for 20 years, whereas the same waterfall will enable its owner to catch these 10 pounds sterling every year for 30 years, or 100 years, or an indefinite number of years, so long as circumstances remain the same. On the other hand, if some new method of production, which is not suitable for water power, should reduce the cost price of the commodities produced by steam machinery from 100 to 90 pounds sterling, the surplus profit, and with it the rent, and with it the price of the waterfall, would disappear.

Now that we have explained our general conception of differential rent, we will pass on to its consideration in agriculture, strictly so-called. What applies to it will also apply on the whole to mines.

CHAPTER XXXIX.

THE FIRST FORM OF DIFFERENTIAL RENT.

(*Differential Rent I.*)

Ricardo is quite right when he writes the following sentences:

"Rent is always the difference between the produce obtained by the employment of two equal quantities of capital and labor" (*Principles,* p. 59). [He means differential rent, for he assumes that no other rent but differential rent exists.] He should have added "On the same quantities of land," so far as ground-rent and not surplus profit in general is concerned.

In other words, surplus profit, if normal and not due to accidental transactions in the process of circulation, is always produced as a difference between the products of two equal quantities of capital and labor. This surplus profit is transformed into ground rent, when two equal quantities of capital and labor are employed on equal quantities of land with unequal results. However, it is by no means absolutely necessary that this surplus profit should arise from unequal results of equal quantities of invested capital. The various investments may also employ unequal quantities of capital. Indeed, this is generally the case. But equal aliquot parts, for instance 100 pounds sterling of each, give unequal results; that is, their rates of profit are different. This is the general prerequisite for the existence of surplus profit in any sphere, where capital is invested. The second prerequisite is the transformation of this surplus profit into ground-rent (and of rent in general as distinguished from profit); it should

always be analysed, when, how, under what conditions this transformation takes place.

Ricardo is also right in the following sentence, provided it is limited to differential rent: "Whatever diminishes the inequality in the produce obtained on the same or on new land, tends to lower rent; and whatever increases that inequality, necessarily produces an opposite effect and tends to raise it." (P. 74.)

However, among these causes are not merely the general ones (fertility and location), but also 1) the distribution of taxes, according to whether it works uniformly or not; it always has the latter effect, for instance in England, when it is not centralised and when the tax is levied on the land, not on the rent; 2) the inequalities arising from the different development of agriculture in different parts of the country, since this line of industry, on account of its traditional character, is more difficult to level than manufacture; 3) the inequality in the distribution of capital among the capitalist tenants. Since the capture of agriculture by the capitalist mode of production, the transformation of independently producing farmers into wage workers, is in fact the last conquest of this mode of production, these inequalities are greater here than in any other line of industry.

After these preliminary remarks I will give a brief summary of the peculiarities of my own analysis as distinguished from that of Ricardo, etc.

We consider first the unequal results of equal quantities of capital, applied to different lands of equal area; or on lands with unequal areas, but calculated on the same aliquot parts of it.

The two general causes of these unequal results independent of capital, are 1) Fertility. (With reference to this first point the analysis should state, what is included in the natural fertility of lands, and what elements enter into it.) 2) The location of the lands. This is a deciding factor in

colonies, and in general determines the succession in which lands shall be taken under cultivation. Furthermore it is evident that these two different causes of differential rent, fertility and location, may work in opposite directions. A certain soil may be very favorably located and yet be very poor in fertility, and vice versa. This circumstance is important, for it explains how it is that the work of opening the soil of a certain country to cultivation may equally well proceed from the worse to the better soil, instead of vice versa. Finally it is clear that the progress of social production has on the one hand the general effect of leveling the differences arising from location as a cause of ground-rent, by creating local markets and improving locations by means of facilities for communication and transportation; and that, on the other hand, it increases the differences of the individual locations in a certain district by separating agriculture from manufacture and forming great centers of production on the one hand while relatively isolating the agricultural districts on the other hand.

For the present, however, we leave this point, location, out of consideration and confine ourselves to natural fertility. Aside from climatic factors, etc., the difference in natural fertility is one of the chemical compositions of the top soil, that is of its different contents in plant nourishment. However, assuming the chemical composition and natural fertility in this respect to be the same for two areas, the actual fertility will be different according to whether these elements of plant nourishment have a form, in which they may be more or less easily assimilated and immediately utilised for nourishing plants. Hence it will depend partly upon the chemical, partly upon the mechanical development of agriculture, to what extent the same natural fertility may be made available in fields of the same natural fertility. Fertility, although an objective quality of the soil, always implies economic relations, a relation to the existing chemical and mechanical development in agriculture, of course it changes with such a development. By dint of chemical applications (such as the use of certain liquid manures to stiff clay loam,

or burning of heavy clay soils) or of mechanical appliances (such as special plows for heavy soils) the obstacles may be removed, which made a soil of the same fertility as some other actually less fertile (drainage also belongs under this head). Or even the succession of soils in cultivation may be changed thereby, as was the case, for instance, with light sandy soil and heavy clay soil in a certain period of development of English agriculture. This shows once more that historically, in the succession of soils under cultivation, one may pass just as well from very fertile soils to less fertile ones as vice versa. The same may come to pass by any artificially created improvement in the composition of the soil, or by a mere change in the methods of agriculture. Finally the same result may be brought about by a change in the succession of the predominant kinds of soil, owing to different conditions of the subsoil, as soon as it is likewise taken into cultivation and turned over into top layers. This is caused either by the employment of new methods of agriculture (such as planting of stock feed), or any mechanical appliances, which either turn the subsoil into top layers, or mix it with the top soil, or cultivate the subsoil without throwing it up.

All these influences upon the differential fertility of different lands amount to the practical result that for the economic fertility the state of the productivity of labor, in this case the faculty of agriculture of making the natural fertility of the soil immediately available, a faculty which varies in different periods of development, is as much an element in the so-called natural fertility of the soil as its chemical composition and its other natural qualities.

We assume, then, the existence of a certain stage of development of agriculture. We assume furthermore, that the predominant succession of soils is calculated with reference to this stage of development, a thing which is, of course, always the case with simultaneous investments of capital on the different soils. Under such circumstances differential rent may form either in an ascending or a descending succession, for although the succession is an established fact for

the totality of the actually cultivated lands, a movement of succession leading to this formation always preceded it.

Let us assume the existence of four kinds of soil, A, B, C, D. Let us furthermore assume that the price of one-quarter of wheat is three pounds sterling, or 60 shillings. Since rent is here merely a differential rent, this price of 60 shillings per quarter for the worst soil is equal to the cost of production, that is equal to the capital plus the average profit.

Let A be this worst soil and yield for each 50 shillings of expenditure one-quarter of wheat worth 60 shillings, so that the profit is 10 shillings, or 20%.

Let B yield for the same expenditure 2 quarters of wheat, or 120 shillings. This would be 70 shillings of profit, or a surplus profit of 60 shillings.

Let C yield for the same expenditure 3 quarters, or 180 shillings; total profit 130 shillings, surplus profit 120 shillings.

Let D yield 4 quarters, 240 shillings, 190 shillings of profit, 180 shillings of surplus profit.

Then we shall have the following succession:

Table I.

Class of Soil	Product		Capital Advanced	Profit		Rent	
	Quarters	Shillings		Quarters	Shillings	Quarters	Shillings
A	1	60	50	⅙	10	—	—
B	2	120	50	1⅙	70	1	60
C	3	180	50	2⅙	130	2	120
D	4	240	50	3⅙	190	3	180
Totals	10	600				6	360

The respective rents are: D = 190 sh. — 10 sh., or the difference between D and A; C = 130 — 10 sh., or the difference between C and A; B = 70 — 10 sh., or the difference between B and A; and the total rent for B, C, D equals 6 quarters, or 360 shillings, equal to the sum of the differences between D and A, C and A, B and A.

This succession representing a certain product in a certain condition may, abstractly considered, descend from D to A, from very fertile to less and less fertile soil, or rise from A to D, from relatively poor to more and more fertile soil, or may fluctuate in a now rising, now descending curve,

for instance from D to C, from C to A, from A to B (and we have already mentioned the reasons why this might take place in reality).

The process leading to the descending succession took place in the following manner: The price of one-quarter of wheat rose gradually from, say, 15 shillings to 60 shillings. As soon as the 4 quarters produced by D (assume them to have been so many million quarters) did not suffice any more, the price of wheat rose to a point where the missing supply could be raised by C. That is to say, the price of wheat must have risen to 20 shillings per quarter. When it had risen to 30 shillings per quarter, B could be taken under cultivation, and when it reached 60 shillings per quarter, A could be taken in, and the capital invested in it did not have to be content with a lower rate of profit than 20%. In this way a rent was formed for D, first of 5 shillings per quarter, or 20 shillings for the 4 quarters produced by it; then of 15 shillings per quarter, or 60 shillings, then of 45 shillings per quarter, or a total of 180 shillings for 4 quarters.

If the rate of profit of D originally was likewise 20%, then its total profit on 4 quarters of wheat was also but 10 shillings, but this stood for more grain when the price was 15 shillings than it does when the price is 60 shillings. But since the grain enters into the reproduction of labor-power, and a portion of each quarter has to make good some wages and another some constant capital, the surplus-value under this condition was higher, and to that extent, other things being the same, the rate of profit. (The matter of the rate of profit will have to be analysed separately and in detail.)

On the other hand, if the succession went the opposite way, that is, if the movement started from A, then the price of wheat at first rose above 60 shillings, when new land had to be taken under cultivation. But when the necessary supply was raised by B, a supply of 2 quarters, the price fell once more to 60 shillings. B raised wheat at a cost of 30 shillings per quarter, but sold it at 60 shillings, because its supply sufficed just to cover the demand. In this way a rent was formed, first of 60 shillings for B, and in the same way for

C and D; always assuming that the market price remained at 60 shillings, although C and D relatively raised wheat having a value of 20 and 15 shillings respectively, because the supply of the one-quarter raised by A was as much needed as ever to satisfy the total demand. In this case the rising of the demand above the supply first raised by A, then by A and B, would not have made it possible to cultivate successively B, C and D, but would merely have caused a general extension of the sphere of cultivation, by which the more fertile lands came under its control later.

In the first succession, an increase in the price would raise the rent and lower the rate of profit. The lowering of the rate of profit might be entirely or partially checked by opposing circumstances. This point will have to be treated later. It should not be forgotten, that the general rate of profit is not determined uniformly in *all* spheres of production by the surplus-value. It is not the agricultural profit, which determines the industrial profit, but vice versa. But of this more anon.

In the second succession the rate of profit on the invested capital would remain the same. The mass of profit would present itself in less grain; but the relative price of grain, compared with that of other commodities, would have risen. Only, whatever increase there might be in the profit, would separate itself from the actual profit in the form of rent, instead of flowing into the pockets of the capitalist tenant and appearing as a growing profit. The price of grain, however, would remain unchanged under the conditions assumed here.

The development and growth of differential rent would remain the same, both with unaltered and with increasing prices, and with a continued progress from worse to better land as well as with a continued regression from better to worse land.

So far we have assumed 1) that the price rises in the one succession and remains stationary in the other; 2) that there is a continual progression from better to worse soil, or from worse to better soil.

But now let us assume that the demand for grain rises from its original figure of 10 to 17 quarters; furthermore, that the worst soil A is displaced by another soil A′, which raises $1\frac{1}{3}$ quarters at a price of production of 60 shillings (50 sh. cost plus 10 sh. for 20% profit), so that its price of production for one-quarter is 45 shillings; or, perhaps, the old soil A may have become improved through a continued rational cultivation, or may be cultivated more productively at the same cost, for instance, by the introduction of clover, etc., so that its product with the same investment of capital rises to $1\frac{1}{3}$ quarters. Let us also assume that the classes B, C and D of soil supply the same product as ever, but that new classes of soil have been introduced, for instance, A′ of a fertility between A and B, furthermore B′ and B″ of a fertility between B and C. In that case we should witness the following phenomena:

1) The price of production of one-quarter of wheat, or its regulating market price, would have fallen from 60 shillings to 45 shillings, or by 25%.

2) The cultivation would have proceeded simultaneously from more fertile to less fertile soil, and from less fertile to more fertile soil. The soil A′ is more fertile than A, but less fertile than the hitherto cultivated soils B, C and D. And B′ and B″ are more fertile than A, A′ and B, but less fertile than C and D. The succession would thus have proceeded in crisscross fashion. Cultivation would not have proceeded to soil absolutely less fertile than A, etc., but it would have proceeded to relatively less fertile than the soils C and D; on the other hand, cultivation would not have taken up soil absolutely more fertile, but at least relatively more fertile compared to the hitherto least fertile soils A or A and B.

3) The rent on B would have fallen; likewise the rent on C and D; but the total rental would have risen from 6 quarters to $7\frac{2}{3}$; the mass of the cultivated and rent paying lands would have increased, and the mass of the product would have risen from 10 quarters to 17. The profit, if remaining the same for A, expressed in grain, would have risen; but the

rate of profit itself might have risen, because the relative surplus-value did. In this case the wages, and with them the investment of variable capital, and with it the total investment, would have been reduced on account of the cheapening of the means of subsistence. The total rental would have fallen from 360 shillings to 345 shillings.

Let us draw up the new succession.

Table II.

Class of Soil	Product		Capital Invested	Profit		Rent		Price of Production per Quarter
	Qrs.	Sh.		Qrs.	Sh.	Qrs.	Sh.	
A	1 1 3	60	50	2/9	10			45 sh
A'	1 2/3	75	50	5/9	25	1/3	15	36 sh
B	2	90	50	8/9	40	2/3	30	30 sh
B'	2 1/3	105	50	1 2/9	55	1	45	25 2/7 sh
B''	2 2 3	120	50	1 5/9	70	1 1/3	60	22 1/2 sh
C	3	135	50	1 8/9	85	1 2/3	75	20 sh
D	1	180	50	2 8/9	130	2 2/3	120	15 sh
Total	17					7 2 3	345	

Finally, if only the classes of soil A, B, C and D were cultivated, but their productivity raised in such a way that A would produce 2 quarters instead of 1, B, 4 quarters instead of 2, C, 7 quarters instead of 3, and D, 10 quarters instead of 4, so that the same causes would have acted differently upon the various classes of soil, the total production would have increased from 10 quarters to 23. Assuming that the demand would absorb these 23 quarters by an increase of the population and the falling of prices, we should get the following table:

Table III.

Class of Soil	Product		Capital Invested	Price of Production per Quarter	Profit		Rent	
	Qrs	Sh			Qrs.	Sh.	Qrs.	Sh.
A	2	60	50	30	1/3	10		
B	4	120	50	15	2 1/3	70	2	60
C	7	210	50	8 4/7	5 1/3	160	5	150
D	10	300	50	6	8 1 3	250	8	240
Total	23						15	450

The numbers in this and in other tables are arbitrarily chosen, but the assumptions are quite rational.

The first and principal assumption is that the improvement in agriculture acts differently upon different soils, and in this case more so upon the best classes of soil, C and D, than upon the A and B classes. Experience has shown that

this is indeed the case, although the opposite may also take place. If the improvement should affect the lesser soils more than the better ones, the rent on these last ones would have fallen instead of rising.

But in our table we have assumed that the absolute growth of the fertility of all classes of soil is simultaneously accompanied by an increase of the higher relative fertility of the better classes of soil, C and D, which implies an increasing difference between the various products with the same investment of capital, and thus an increase of the differential rent.

The second assumption is that the total demand must keep step with the increase of the total product. In the first place, one need not imagine such an improvement to come abruptly, but gradually, until the succession in table III is reached. In the second place, it is a mistake to say that the consumption of necessities of life does not grow with their cheapening. The abolition of the corn laws in England proved the reverse (see Newman), and the contrary view is derived merely from the fact that great and sudden differences in the harvests, caused by the weather, bring about at one time an extraordinary fall, at another an extraordinary rise in the prices of cereals. While in such a case the sudden and short cheapness does not get time to exert its full effect upon the extension of consumption, the opposite takes place when the cheapening process arises out of the lowering of the regulating price of production itself and has permanency. In the third place, a portion of the grain may be consumed in the shape of whiskey or beer. And the rising consumption of these articles is by no means confined within narrow limits. In the fourth place, this matter depends partly upon the increase of the population, and for the other part the country may be a grain exporting one, as England was far beyond the middle of the 18th century, so that the demand is not regulated by the boundaries of a mere national consumption. Finally the increase and cheapening of the wheat production may have the result of making wheat instead of rye or oats the principal article of consumption for the masses, so that

the demand for it may grow for this reason alone, just as the opposite may take place when the product decreases and prices rise.— Under these assumptions, and with the figures previously chosen, succession No. III would show a fall in the price per quarter from 60 shillings to 30, that is 50%, that production compared to succession No. I would increase from 10 quarters to 23, in other words, by 130%; that the rent would remain stationary upon the soil B, be doubled upon C, and more than doubled upon D, and that the total rental would increase from 18 pounds sterling to 22, a growth of $22\frac{1}{9}$%.

A comparison of these three tables (taking table I twice, one rising from A to D, and one descending from D to A), which may be considered either as existing gradations under some definite stage of society, for instance, as existing side by side in three different countries, or as succeeding one another in different periods of development in the same country, would show:

1) That the succession, when complete, whatever may have been the course of its formative process, always has the appearance of being in a descending line; for in studying the rent, the point of departure will always be the soil producing the maximum of rent, and the closing point will be the soil yielding no rent.

2) That the price of production of the worst soil, which yields no rent, is always the regulating market price, although this market price in table I, if its succession was formed in an ascending line, could not remain stationary, unless better and better soil were cultivated. In that case the price of the grain produced on the best soil is a regulating one to the extent that it depends upon the quantity produced on such soil in what measure the soil of class A shall remain the regulator. For instance, if B, C, D should produce more than the demand calls for, then A would cease to be the regulator. This is what Storch has in mind, when he adopts the best class of soil as the regulating one. In this manner the American price of cereals regulates the English price.

3) Differential rent arises from the differences in the nat-

ural fertility of the soil which depends upon the prevailing degree of development of cultivation (leaving aside for the present the question of location), in other words, from the limited area of the best lands, and from the circumstance that equal capitals must be invested in unequal soils, which yield unequal products with the same capital.

4) The existence of differential rent and of a graduated succession of differential rents may be due quite as much to a descending succession, which leads from the better to the worse soils, as to an ascending one, which takes the opposite direction. Or it may be brought about by alternating forward and backward movements. (Succession No. II may form by a process from D to A, or from A to D; succession No. II comprises both movements.)

5) According to its mode of formation, differential rent may develop with a stationary, rising or falling price of the products of the soil. With a falling price the total production and the total rental may rise, and rent may form on hitherto rentless lands, even though the worst soil A may have been displaced by a better one, or may itself have become improved, and although the rent may decrease on other better, or even the best, lands (table II); this process may also be accompanied by a fall of the total rent (in money). Finally, when prices are falling on account of a general improvement of cultivation, so that the product and the price of the product of the worst soils decrease, the rent may remain the same or may fall on a part of the better soils, but rise on the best soils. It is true that the differential rent of every soil, compared with the worst soil, depends upon the price, say, of the quarter of wheat, when the difference of the quantity of products is given. But when the price is given, differential rent depends upon the magnitude of the differences of the quantity of products, and if, with an increasing absolute fertility of all soils that of the better soil grows relatively more than that of the worse soil, the magnitude of this difference grows to that extent. In this way (see Table I), when the price is 60 shillings, the rent of D is determined by its differential product as compared to A, in other words,

by its surplus of 3 quarters. The rent is therefore three times sixty, or 180 shillings. But in Table III, in which the price is 30 shillings, the rent is determined by the quantity of the surplus product of D as compared to A, that is 8 quarters, and therefore it is eight times thirty, or 240 shillings.

This does away with the primitive misconception of differential rent still found among men like West, Malthus, Ricardo, to the effect that it necessarily requires a progress toward worse and worse soil, or an ever decreasing productivity of agriculture. It rather may exist, as we have seen, with a progress to a better and better soil; it may exist when a better soil takes the lowest position formerly occupied by the worst soil; it may be accompanied with a progressive improvement of agriculture. Its premise is merely the inequality of the different kinds of soil. So far as the development of productivity is concerned, it implies that the increase of absolute fertility of the total area does not do away with this inequality, but either increases it, or leaves it unchanged, or merely reduces it somewhat.

From the beginning to the middle of the 18th century England's cereal prices fell continually in spite of the falling prices of gold and silver, while at the same time (viewing this entire period) there was an increase of rent, of the rental, of the area of the cultivated lands, of agricultural production, and of the population. This corresponds to Table I combined with Table II in an ascending line, but in such a way that the worst land A is either improved or eliminated from the grain area; this does not imply that it was not used for other agricultural or industrial purposes.

From the beginning of the 19th century (the date should be given more precisely) until 1815 there is a continual rise in the cereal prices, accompanied by a steady growth of the rent, of the rental, of the volume of the cultivated lands, of agricultural production, and of the population. This corresponds to Table I in a descending line. (Quote here some passages on the cultivation of inferior lands in those times.)

In Petty's and Davenant's time, the farmers and land own-

ers complain about the improvements and the breaking of new ground; the rent on the superior soils falls, the total rental increases through the extension of the soils yielding rent.

(These three points should be illustrated later on by quotations; likewise the difference in the fertility of the different cultivated portions of the soil in a certain country.)

The general rule in differential rent is that the market-value always stands above the total price of production of the mass of products. For instance, take Table I. The ten quarters of the total product are sold at 600 shillings, because the market price is determined by the price of production of A, which amounts to 60 shillings per quarter. But the actual price of production is:

A	1 qr. = 60 sh.	1 qr. = 60 sh.
B	2 qrs. = 60 sh.	1 qr. = 30 sh.
C	3 qrs. = 60 sh.	1 qr. = 20 sh.
D	4 qrs. = 60 sh.	1 qr. = 15 sh.
	10 qrs. = 240 sh.	Average 1 qr. = 24 sh.

The actual price of production of these 10 quarters is 240 shillings. But they are sold at 600 shillings, 250% too dear. The actual average price for 1 quarter is 24 shillings; the market price is 60 shillings, also 250% too dear.

This is a determination by the market-value, which is enforced on the basis of capitalist production by means of competition; it creates a false social value. This arises from the law of the market-value, to which the products of the soil are subject. The determination of the market-value of the products, including the products of the soil, is a social act, although performed by society unconsciously and unintentionally. It rests necessarily upon the exchange-value of the product, not upon the soil and its differences in fertility.

If we imagine that the capitalistic form of society is abolished and society is organized as a conscious and systematic association, then those 10 quarters represent a quantity of independent labor, which is equal to that contained in 240 shillings. In that case society would not buy this product of the soil at two and a half times the labor time contained in it. The basis of a class of land owners would thus be

destroyed. This would have the same effect as a cheapening of the product to the same amount by foreign imports. While it is correct to say that, by retaining the present mode of production but paying the differential rent to the state, the prices of the products of the soil would remain the same, other circumstances remaining unchanged, it is wrong to say that the value of the products would remain the same, if capitalist production were superseded by association. The sameness of the market prices for commodities of the same kind is the way in which the social character of value asserts itself on the basis of capitalist production, as it does of any production resting on the exchange of commodities between individuals. What society in its capacity as a consumer pays too much for the products of the soil, what constitutes a minus for the realisation of its labor time in agricultural production, is now a plus for a portion of society, for the landlords.

A second circumstance, important for the analysis to be given under II in the next chapter, is the following:

It is not merely a question of the rent per acre, or per hectare, nor in general of a difference between the price of production and the market price, nor between the individual and general price of production per acre, but it is also a question of how many acres of each class of soil are under cultivation. The point of importance is here primarily the magnitude of the rental, that is, of the total rent of the entire cultivated area; but it serves us at the same time as a transition to the development of a rise in the rate of the rent, although there is neither a rise in the prices, nor an increase in the differences of the relative fertility of the various kinds of soil when prices are falling.

We had above:

Table I.

Class of Soil	Acres	Cost of Production	Product	Rent in Grain	Rent in Money
A	1	3 p. st.	1 qr.	0	0
B	1	3 p. st.	2 qrs.	1 qr.	3 p. st.
C	1	3 p. st.	3 qrs.	2 qrs.	6 p. st.
D	1	3 p. st.	4 qrs.	3 qrs.	9 p. st.
Totals	4		10 qrs.	6 qrs.	18 p. st.

Now let us assume that the number of cultivated acres is doubled in every class. Then we have:

Table I a.

Class of Soil	Acres	Cost of Production	Product	Rent in Grain	Rent in Money
A	2	6 p. st.	2 qrs.	0	0
B	2	6 p. st.	4 qrs.	2 qrs.	6 p. st.
C	2	6 p. st.	6 qrs.	4 qrs.	12 p. st.
D	2	6 p. st.	8 qrs.	6 qrs.	18 p. st.
Totals	8		20 qrs.	12 qrs.	36 p. st.

Let us assume two other cases, and let the first be one, in which production expands on the two inferior classes of soil, in the following manner:

Table I b.

Class of Soil	Acres	Cost of Product		Product	Rent in Grain	Rent in Money
		Per Acre	Total			
A	4	3 p. st.	12 p. st.	4 qrs.	0	0
B	4	3 p. st.	12 p. st.	8 qrs.	4 qrs.	12 p. st.
C	2	3 p. st.	6 p. st.	6 qrs.	4 qrs.	12 p. st.
D	2	3 p. st.	6 p. st.	8 qrs.	6 qrs.	18 p. st.
Totals	12		36 p. st.	26 qrs.	14 qrs.	42 p. st.

Finally let us assume an unequal expansion of production and of the cultivated area on all four classes, in the following manner:

Table I c.

Class of Soil	Acres	Cost of Product		Product	Rent in Grain	Rent in Money
		Per Acre	Total			
A	1	3 p. st.	3 p. st.	1 qr.	0	0
B	2	3 p. st.	6 p. st.	4 qrs.	2 qrs.	6 p. st.
C	5	3 p. st.	15 p. st.	15 qrs.	10 qrs.	30 p. st.
D	4	3 p. st.	12 p. st.	16 qrs.	12 qrs.	36 p. st.
Totals	12		36 p. st.	36 qrs.	24 qrs.	72 p. st.

In the first place, the rent per acre remains the same in all these four cases I, I a, I b and I c. For in fact the result of the same investment of capital per acre of the same class of soil has remained unchanged. Nothing more has been assumed than a fact which may be observed in any country at any given moment, namely that the various classes of soil participate in certain definite proportions in the entire cul-

tivated area. And furthermore, a fact which may be observed in any two countries that are compared, or in the same country at different periods of time, namely that the proportion varies in which the cultivated area is distributed among these classes.

If we compare Ia with I, then we see, if the cultivation of the soils of all four classes grows in the same proportion, that a doubling of the cultivated acres doubles the total production, and at the same time doubles the rent in grain and money.

If we compare Ib and Ic successively with I, we see that in both cases a triplication of the area subject to cultivation takes place. It rises in both cases from 4 acres to 12, but in Ib it is the classes A and B which get the greatest share of the increase, although A pays no rent, and B yields the smallest differential rent. But of 8 newly cultivated acres A and B get 3 each, or 6 between the two of them, whereas C and D get only 1 acre each, or together 2 acres. In other words, three-quarters of the increase go to A and B, and only one-quarter to C and D. According to this assumption and comparing Ib with I, the trebled area of cultivation does not result in a trebled product, for the product does not increase from 10 to 30, but only to 26. On the other hand, seeing that a considerable portion of the increase takes place on A, which does not yield any rent, and since the principal portion of the remaining increase takes place on B, the rent in grain rises only from 6 quarters to 14, and the rent in money from 18 pounds sterling to 42.

But if we compare Ic with I, where the soil yielding no rent does not increase in area, and the soil yielding a minimum rent increases but slightly, while the principal portion of the increase takes place on C and D, we find that the trebled area results in an increase of production from 10 quarters to 36, more than three times the quantity. The rent in grain has risen from 6 quarters to 24, or quadrupled; and so has the money rent from 18 pounds sterling to 72.

In all these cases the price of the agricultural product naturally remains stationary. The total rental increases in

all cases with the extension of cultivation, unless it takes place exclusively on the worst soil, which does not pay any rent. But the growth is unequal. In proportion as the extension of cultivation takes place upon the superior classes of soil and consequently the quantity of the products grows not merely at the ratio of expansion of the area, but even faster, the rent in grain and money increases. In proportion as the worst soil and the class next above it share principally in the expansion of the area (provided that the worst soil represents a constant class), the total rental does not rise in proportion to the extension of cultivation. If there are two countries, in which the class A, that yields no rent, is of the same nature, the rental stands in the reverse ratio to the aliquot part represented by the worst soil and the lesser classes next above it in the total area of the cultivated soil, and therefore in the reverse ratio to the quantity of the products of equal investments of capital on the same total areas of land. The proportion between the quantity of the worst cultivated soil and that of the better soil, within the total cultivated area of a certain country, thus has the opposite effect upon the total rental than the proportion between the quality of the worst cultivated soil and that of the better soil has upon the rent per acre and, other circumstances remaining the same, upon the total rental. The confounding these two things has given rise to many mistaken objections to differential rent.

The total rental, then, increases by the mere extension of the cultivation, and by the consequent greater investment of capital and labor in the soil.

But the most important point is this: Although it is our assumption that the proportion of the rents upon the various classes of soil remains the same, calculated per acre, and therefore also the rate of rent considered with reference to the capital invested in each acre, yet we must observe the following: If we compare Ia with I, the case in which the number of cultivated acres and the capital invested in them have been proportionately increased, we find that just as the total production has increased proportionately to the expanded agricultural area, that is just as both of them have been

doubled, so has the rental. It has risen from 18 pounds sterling to 36, just as the number of acres has risen from 4 to 8.

If we take the total area of 4 acres, we find that the total rental amounted to 18 pounds sterling, or the average rent, including the soil which does not pay any rent, 4½ pounds sterling. This calculation might be made, say, by a landlord owning all 4 acres. And in this way the average rent is statistically calculated upon a whole country. The total rental of 18 pounds sterling is secured by the investment of a capital of 10 pounds sterling. We call the ratio of these two figures the rate of rent; in the present case it is 180%.

The same rate of rent follows in Ia, where 8 instead of 4 acres are cultivated, but all classes of land have shared in the same proportion in the increase. The total rental of 36 pounds sterling gives for 8 acres and an invested capital of 20 pounds sterling an average rent of 4½ pounds sterling per acre and a rate of rent of 180%.

But if we consider Ib, in which the increase has taken place mainly upon the two inferior classes of soil, we find there a rent of 42 pounds sterling upon 12 acres, or an average rent of 3½ pounds sterling per acre. The invested total capital is 30 pounds sterling, and the rate of rent 140%. The average rent per acre has decreased by one pound sterling, and the rate of rent has fallen from 180 to 140%. Here then we have an increase of the total rental from 18 pounds sterling to 42, and yet a fall of the average rent, calculated both per acre and per capital, while production grows also, but not proportionately. This takes place, although the rent upon all classes of soil, both per acre and per capital, remains the same. It does so, because three-quarters of the increase go to the class A, which does not pay any rent, and upon class B, which pays only the minimum rent.

If the total extension in the case Ib had taken place only upon the soil A, then we should have 9 acres upon A, 1 acre upon B, 1 acre upon C and 1 acre upon D. The total rental would be 18 pounds sterling, the same as before, the average rent upon the 12 acres would be 1½ p. st. per acre; and a rent of 18 pounds sterling on an invested capital of 30 pounds

sterling would give a rate of rent of 60%. The average rent, both per acre and per invested capital, would have decreased, and the total rental would not have increased.

Finally, let us compare Ic with I and Ib. Compared to I, the area has been trebled, also the invested capital. The total rental is 72 pounds sterling upon 12 acres, or 6 pounds sterling per acre against 4½ pounds sterling in case I. The rate of rent upon the invested capital (72: 30 pounds sterling) is 240% instead of 180%. The total product has risen from 10 quarters to 36.

Compared to Ib, where the total area of the cultivated acres, the invested capital, and the difference between the cultivated classes are the same, but the distribution different, the product is 36 quarters instead of 26, the average rent per acre is 6 pounds sterling instead of 3½, and the rate of rent with reference to the same invested total capital is 240% instead of 140%.

No matter whether we regard the various conditions in Tables Ia, Ib and Ic as existing side by side in different countries, or as existing successively in the same country, we come to the following conclusions: so long as we have the conditions mentioned hereafter, that is, so long as the price of cereals remains unchanged, because the worst rentless soil has the same product; so long as the differences in the productivity of the different cultivated soils remain the same; so long as the respective products of the same invested capitals are the same for aliquot parts (acres) of the areas cultivated in every class of soil; so long as the ratio between the rents per acre of each class of soils and with the same rate of rent upon the capital invested in each portion of the same kind of soil is constant: 1) the rental always increases with the extension of the cultivated area and with the consequent increased investment of capital, with the exception of the case in which the entire increase falls on the rentless soil. 2) Both the average rent per acre (total rental divided by the total number of acres) and the average rate of rent (total rental divided by the invested total capital) may vary very considerably; both of them in the same direction, but in dif-

ferent proportions compared to one another. If we leave out of consideration the case, in which the increase takes place upon the rentless soil, we find that the average rent per acre and the average rate of rent upon the capital invested in agriculture depend upon the proportional shares, which the various classes of soil claim in the cultivated area; or, what amounts to the same, upon the distribution of the employed total capital among the classes of soil of different fertility. Whether much or little land is cultivated, and whether the total rental is therefore larger or smaller (with the exception of the case, in which the increase is confined to A) the average rent per acre, or the average rent per invested capital, remains the same so long as the proportions of the participation of the various classes of soil in the total cultivated area remain unchanged. In spite of the rise, even of a very considerable one, in the total rental with the extension of cultivation and the expansion of the invested capital, the average rent per acre and the average rent per capital fall whenever the extension of the rentless lands, or of the lands of inferior fertility, increases more than that of the superior rent paying ones. On the other hand the average rent per acre and the average rent per capital increase in proportion as the better lands constitute a greater part of the total area and employ a relatively greater share of the invested capital.

Hence, if we consider the average rent per acre, or hectare, of the total cultivated soil, in the way that is generally done in statistical works, by comparing either different countries at different epochs, or different epochs in the same country, we find that the average level of the rent per acre, and consequently the total rental, corresponds in certain proportions (although by no means equal ones, but rather more rapidly moving ones) to the absolute, not to the relative, productivity of agriculture in a certain country, that is, to the mass of products brought forth by it on an average upon the same area. For the larger the share taken by the superior soils in the total cultivated area, the greater is the mass of products brought forth by equal investments of capital upon equally

large areas of land. And the higher is the average rent per acre. In the opposite case the reverse takes place. In this way the rent does not seem to be determined by the ratios of differential fertility, but of absolute fertility, and the law of differential rent seems thereby abolished. For this reason certain phenomena are disputed, or perhaps they are explained by non-existing differences in the average prices of cereals and in the differential fertility of the cultivated lands, whereas such phenomena are merely due to the fact that the ratio of the total rental, either to the total area of the cultivated soil, or to the total capital invested in this soil, so long as the fertility of the rentless soil remains the same and with it the price of production, and so long as the differences of the various classes of soil remain unchanged, is determined not merely by the rent per acre or the rate of rent per capital, but quite as much by the proportional number of acres of each class of soil in the total number of cultivated acres; or, what amounts to the same, by the distribution of the invested total capital among the various classes of land. Curiously enough this fact has been completely overlooked so far. At any rate we see (and this is important for the progress of our analysis), that the relative level of the average rent per acre, and the average rate of rent (or the ratio of the total rental to the total capital invested in the soil), may rise or fall, through the mere extensive expansion of cultivation, while prices remain the same, the differential fertilities of the various soils remain unaltered, and the rent per acre is constant, or while the rate of rent for the capital invested per acre in every actual rent paying class of soil, or for every rent paying capital, remains unchanged.

We have to make the following additional remarks with reference to the form I of the differential rent, which also apply partly to form II:

1) We have seen that the average rent per acre, or the average rate of rent per capital, may rise with an extension of cultivation, with stationary prices, and unaltered differ-

ential fertilities of the cultivated lands. As soon as all the land in a certain country has been appropriated, while the investment of capital in land, the cultivation of the soil, and the population, have reached a certain level — all of which conditions are matters of fact as soon as the capitalist mode of production becomes the prevailing one and invades also agriculture — the price of the uncultivated soil of various classes (assuming differential rent to exist) is determined by the price of the cultivated lands of the same quality and equivalent location. The price is the same — after deducting the cost of breaking the ground — although this soil does not carry any rent. The price of the land is, indeed, nothing but the capitalised rent. But even in the case of cultivated lands their price pays only future rents, as for instance, when the regulating rate of interest is 5% and the rent for twenty years is paid in advance at one time. When land is sold, it is sold as a rent paying land, and the prospective character of the rent (which is here considered as a fruit of the soil, which it is only seemingly) does not distinguish the uncultivated from the cultivated soil. The price of the uncultivated lands, like their rent, which it represents as though it were its contracted formula, is quite illusory, so long as the land is not actually used. But it is thus determined beforehand and realised as soon as a purchaser is found. Hence, while the actual average rent of a certain land is determined by its real average rental per year and by its proportion to the entire cultivated area, the price of the uncultivated portions of land is determined by that of the cultivated land, and is therefore but a reflex of the capital invested in cultivated land and of the results obtained by such investments. Since all lands with the exception of the worst carry rent (and this rent, as we shall see under the head of differential rent II, rises with the mass of the capital and the corresponding intensity of cultivation), the nominal price of the uncultivated portions of the soil is thus formed, and thus they become commodities, a source of wealth for their owners. This explains at the same time, why the price of land increases in the whole region, even in the uncultivated part (Opdyke). The spec-

ulation in land, for instance in the United States, rests merely upon this reflex, which capital and labor throw on the uncultivated land.

2) The advance in the extension of the cultivated soil in general takes place either toward inferior soil, or upon the various existing soils in different proportions according to the way in which they present themselves. The step toward inferior soil naturally is never made voluntarily, but cannot be due to anything but to rising prices (assuming the capitalist mode of production to be a fact), and under any mode of production it will be a result of necessity. However, this is not absolutely so. An inferior soil is preferred to a relatively better soil on account of its location, which decides the point during all extension of cultivation in new countries; furthermore for the reason that, while the formation of the soil in a certain region may belong to the superior ones, the better will nevertheless be relieved here and there by inferior soil, so that the inferior soil must be cultivated along with the superior on account of its location. If inferior soil is surrounded by superior soil, then the better soil gives to the poorer soil the advantage of location as against other and more fertile soil, which is not connected with the already cultivated soil, or with soil about to be cultivated.

In this way the state of Michigan was one of the first to export corn. Yet its soil is on the whole poor. But its vicinity to the state of New York and its water routes by lakes and by the Erie Canal gave to it the advantage before the naturally more fertile states which were farther west. The example of this state, as compared to the state of New York, shows us also the transition from superior to inferior soil. The soil of the state of New York, particularly the western portion of it, is far more fertile, particularly in the raising of wheat. This fertile soil was made sterile by robbing it, and now the soil of Michigan appeared as the more fertile.

"In 1836 wheat flour was shipped from Buffalo to the West, principally from the wheat belt of New York and Canada. At present, only 12 years later, enormous supplies

of wheat and flour are brought from the West, by way of Lake Erie, and shipped East upon the Erie Canal, in Buffalo and the neighboring port of Blackrock. The export of wheat and flour was particularly stimulated by the European famine in 1847. The wheat in western New York thus became cheaper, and the raising of wheat less profitable; this caused the New York farmers to throw themselves more upon cattle raising and dairying, fruit growing, etc., lines in which the Northwest, in their opinion, will be unable to compete with them directly." (J. W. Johnston, *Notes on North America,* London, 1851, I, p. 222.)

3) It is a mistaken assumption that the land in colonies, and in new countries generally, which can export cereals at cheaper prices, must for that reason be necessarily of a greater natural fertility. The cereals are not only sold below their value in such cases, but below their price of production, namely below the price of production determined by the rate of profit in the older countries.

The fact that we, as Johnston says (p. 223) "are accustomed to connect with these new states, which ship annually such large supplies of wheat to Buffalo, the idea of great natural fertility and endless stretches of rich soil," depends primarily upon economic conditions. The entire population of such a country, for instance of Michigan, is at first almost exclusively engaged in agriculture, and particularly in producing agricultural goods in large masses, which they can alone exchange for products of industry and tropical goods. The whole surplus product of this population appears, therefore, in the shape of cereals. This distinguishes from the outset the colonial states founded on the basis of the modern world market from those of former, particularly of antique, times. They receive from the world market finished products, which they would have to make themselves under different circumstances, such as clothing, tools, etc. Only on such a basis were the southern states of the Union enabled to make of cotton their staple product. The division of labor upon the world market permitted this. Hence, if they seem to produce a large surplus product in spite of their youth and small

relative population, it is not due to the fertility of their soil, nor to the productivity of their labor, but to the onesided form of their labor, and therefore of the surplus product, in which this labor is incorporated.

Furthermore, a relatively inferior soil, which is newly cultivated and was never touched by civilisation before, has accumulated much easily soluble plant food, at least in its upper layers, provided the climatic conditions are not extremely hard, so that it will yield crops without any manure for a long time, even with very superficial cultivation. The western prairies have the additional advantage of requiring hardly any expenses for clearing, since nature has cleared them herself.[126] In less fertile districts of this kind a surplus is produced, not through the great fertility of the soil or the yield per acre, but through the large number of acres, which may be superficially cultivated, because this soil costs the cultivator little or nothing compared with older countries. For instance, where share farming exists, as it does in certain parts of New York, Michigan, Canada, etc., there this condition is found. A family cultivates superficially, say, 100 acres, and although the product per acre is not large, the product of 100 acres yields a considerable surplus for sale. In addition to this cattle may be kept on natural pastures for almost nothing, without any artificial grass meadows. It is the quantity, not the quality of the soil, which decides the point here. The possibility of this superficial cultivation is naturally more or less rapidly exhausted, in a reverse ratio to the fertility of the new soil, and in a direct ratio to the export of its products. "And yet such a country will yield excellent harvests, even of wheat; whoever skims the first cream off the soil, will be able to ship an

[126] [It is precisely the rapidly growing cultivation of such prairie or steppe districts which of late turns the renowned statement of Malthus, that the population "presses upon the means of subsistence," into ridicule, and has created the reverse of it in the complaints of the agrarians, who wail that agriculture and with it Germany will be ruined, unless the means of subsistence which are pressing upon the population are kept out by force. The cultivation of these steppes, prairies, pampas, llanos, etc., is only in its beginnings; its revolutionising effect on European agriculture will, therefore, make itself felt later on even more than hitherto. — F. E.]

abundant surplus of wheat to the market" (L. c., p. 224). In countries of older civilisation the property relations, the determination of the price of the uncultivated soil by that of the cultivated, etc., make such an extensive economy impossible.

That this soil does not have to be very rich, as Ricardo imagines, nor soils of equal fertility have to be cultivated, may be seen from the following: In the state of Michigan 465,900 acres were planted in 1848 with wheat and produced 4,739,300 bushels, or an average of $10\frac{1}{5}$ bushels per acre; deducting the seed grain this leaves less than 9 bushels per acre. Of the 29 counties of this state 2 produced an average of 7 bushels, 3 an average of 8 bushels, 2 one of 9, 7 one of 10, 6 one of 11, 3 one of 12, 4 one of 13 bushels, and only one county produced an average of 16 bushels, and another of 18 bushels per acre (L. c., p. 226).

In practical agriculture a higher fertility of the soil coincides with a greater immediate utilisation of this fertility. This may be greater in a naturally poor soil than in a naturally rich one; but it is the kind of soil which a colonist will take up first, and must take up from lack of capital.

4) The extension of cultivation to greater areas — aside from the case just mentioned, in which recourse must be had to inferior soil than that hitherto cultivated — upon the various classes of soil from A to D, for instance, the cultivation of larger tracts of B and C, does not presuppose by any means a previous rise of the prices of cereals, any more than the annually increasing expansion, for instance of cotton spinning, presupposes a continual rise in the price of yarn. Although a considerable rise or fall of market prices affects the volume of production, nevertheless, aside from this, that relative overproduction which is in itself identical with accumulation always takes place even with average prices, whose stand has neither a paralysing nor an exceptionally stimulating effect upon production. This takes place in agriculture as well as in all other capitalistically managed lines of production. Under different modes of production, this relative overproduction is effected directly

by the increase of population, and in colonies by continual immigration. The demand increases constantly, and in anticipation of this new capital is continually invested in new land, although the products of this land will vary according to circumstances. It is the formation of new capitals, which in itself brings this about. But so far as the individual capitalist is concerned, he measures the volume of his production by that of his available capital, to the extent that he himself can still superintend it. What he aims at is to occupy as much room as possible on the market. If there is any overproduction, he does not blame himself, but his competitors. The individual capitalist may expand his production by appropriating a larger aliquot share of the existing market, or by expanding the market itself.

CHAPTER XL.

THE SECOND FORM OF DIFFERENTIAL RENT.

(*Differential Rent II.*)

So far we have considered differential rent only as the result of the different productivity of different investments of capital upon equal areas of land with different fertilities, so that the differential rent was determined by the difference between the yield of the capital invested in the worst, rentless, soil and that of the capital invested in the superior soils. Here we had the invested capitals side by side upon different areas of land, so that every new investment of capital signified a more extensive cultivation of the soil, an expansion of the cultivated area. But in the last analysis the differential rent was by its nature merely the result of the different productivity of equal capitals invested in land.

But could it make any difference, perhaps, whether masses of capital of different productivities are invested successively on the same piece of land, or side by side on different pieces of land, provided that the results are the same?

In the first place, it cannot be denied that it is immaterial, so far as the formation of surplus profit is concerned, whether 3 pounds sterling of cost of production are invested in one acre of A and yield one-quarter of wheat, so that 3 pounds sterling are the price of production and regulating market price of 1 quarter, while 3 pounds sterling of cost of production applied to one acre of B give 2 quarters, and with them a surplus profit of 3 pounds sterling, while in the same way 3 pounds sterling of cost of production applied to one acre of C give 3 quarters and 6 pounds sterling of surplus profit, and finally 3 pounds sterling of cost of production applied to one acre of D give 4 quarters and 9 pounds sterling of surplus profit; or whether the same result is accomplished by applying these 12 pounds sterling of cost of production, or 10 pounds sterling of capital, with the same results and in the same succession upon one and the same acre. It is in either case a capital of 10 pounds sterling, a part of whose successively invested shares of a value of $2\frac{1}{2}$ pounds sterling each, whether invested in four acres of different fertility side by side, or successively upon one and the same acre, does not yield any surplus profit on account of their different products, whereas the other parts yield a surplus profit in proportion to the difference of their yield from that of the rentless investment.

The surplus profits and the various rates of surplus profit for different parts of the value of capital are formed in the same way in either case. And the rent is nothing but a form of this surplus profit, which constitutes its substance. But at any rate, there are some difficulties in this second method in the way of the transformation of surplus profit into rent, of this change of form, which implies the transfer of the surplus profit from the capitalist tenant to the owner of the land. This accounts for the obstinate resistance of the English tenants to an official statistics of agriculture. It accounts for the struggle between them and the landlords over the ascertainment of the actual results of an investment of capital (Morton). For the rent is fixed when the lease for the land is made out, and after that the surplus profits arising from

excessive investments of capital flow into the pockets of the tenant so long as the lease lasts. Therefore the tenants fought for long leases, and on the other hand the landlords enforced by their superior numbers an increase of the tenancies at will, which could be cancelled annually.

It is evident from the outset that even though it is immaterial for the law forming the surplus profit, whether equal capitals are invested with unequal results side by side upon equal areas of land, or whether they are invested successively on the same land, it does make a considerable difference for the conversion of surplus profit into ground-rent. The latter method confines this conversion within boundaries, which are narrower on one side and less definite on the other. For this reason the business of the tax assessor, as Morton shows in his "*Resources of Estates,*" becomes a very important, complicated and difficult profession in countries with an intensive cultivation (and economically we mean by intensive cultivation nothing else but the concentration of capital upon the same piece of land, instead of its distribution over adjoining pieces of land). If the improvements of the soil are of the more permanent kind, the artificially raised differential fertility of the soil coincides with its natural fertility as soon as the lease expires, and this leads to the assessment of the rent by the basis of that which is due to the mere differences of fertility in different soils generally. On the other hand, so far as the formation of surplus profit is determined by the magnitude of the working capital, the amount of the rent paid by a certain amount of capital is added to the average rent of the country and care is taken that the new tenant commands sufficient capital to continue cultivation in the same intensive manner.

In the study of differential rent II, the following points must be noted:

1) Its basis and point of departure, not merely historically, but even as concerns its movements at any given period, is differential rent I, that is the simultaneous cultivation side

by side of soils of different fertility and location; in other words the simultaneous application, side by side, of different portions of the total agricultural capital upon soil areas of different quality.

Historically this is a matter of course. In colonies the colonists have but little capital to invest. The principal agents of production are labor and land. Every individual head of a family seeks to acquire for himself and his, an independent field of employment, apart from that of his fellow colonists. This must be generally the case even under pre-capitalist modes of production in agriculture proper. In the case of sheep pastures, and generally of cattle raising as an independent line of production, the exploitation of the soil is more or less collective, and it is extensive from the outset. The capitalist mode of production starts out from former modes of production, in which the means of production are actually or legally the property of the tiller himself, in which agriculture is carried on by professionals. Naturally this mode of agriculture gives way but gradually to the concentration of means of production and their transformation into capital with a simultaneous change of direct producers into wage workers. So far as the capitalist mode of production asserts itself here in a typical manner, it does so at first mainly in sheep pastures and cattle raising; after that it does not assert itself by a concentration of capital upon a relatively small area of land, but in production on a larger scale, so that the expense of keeping horses and other costs of production may be saved; but in fact not by investing more capital in the same land. It is furthermore in the nature of field tillage that capital, which implies at this stage also the means of production already produced, should become the dominating element of agriculture, when cultivation has reached a certain hight and the soil has become correspondingly exhausted. So long as the tilled land constitutes a small area compared to the untilled, and so long as the strength of the soil has not been exhausted (and this is the case so long as cattle raising prevails with meat as the staple food, before agriculture proper and plant food have become

dominant), the beginnings of the new mode of production show their opposition to peasants' economy mainly by large tracts of land which are tilled for the account of some capitalist, in other words, the new mode of production itself starts out with an extensive application of capital to larger areas of land. It should therefore be remembered from the outset, that differential rent No. I is the historical basis from which a start is made. On the other hand, the movement of differential rent No. II puts in its appearance at any given moment only upon a territory, which is itself but the variegated basis of differential rent No. I.

2) In differential rent No. II, the differences in the distribution of capital (and of the ability to get credit) among tenants are added to the differences in fertility. In manufacture proper, each line of business rapidly develops its own minimum volume of business and a corresponding minimum of capital, below which no individual business can be carried on successfully. In the same way each line of business develops, above this minimum, a normal size of capital, which the mass of producers must be able to command and do command. Whatever exceeds this, can form extra profits; whatever is below this, does not get the average profit. The capitalist mode of production invades agriculture but slowly and unevenly, as may be seen in England, the classic land of the capitalist mode of production in agriculture. To the extent that no free importation of cereals exists, or that its effect is but limited, because its volume is small, the producers working upon inferior soil and thus with worse than average conditions of production determine the market price. A large portion of the total mass of capital invested in husbandry and available for it is in their hands.

It is true that the farmer spends much labor on his small plot of land. But it is labor isolated from the objective social and material conditions of productivity, labor robbed and stripped of these conditions.

This circumstance makes it possible for the real capitalist tenants to appropriate a portion of the surplus profit; this would not be so, at least so far as this point is concerned, if

the capitalist mode of production were as uniformly developed in agriculture as in manufacture.

Let us first consider the formation of surplus profit in differential rent No. II, without taking notice for the present of the conditions under which the conversion of this surplus profit into ground rent may take place.

It is evident, in that case, that differential rent No. II is but a different expression of differential rent No. I, but that it coincides with it in substance. The different fertility of the various kinds of soil exerts its influence in the case of differential rent No. I only to the extent that it brings about unequal results of the capitals invested in the soil, so that the products of equal capitals, or of equal aliquot parts of unequal capitals, are unequal. Whether this inequality takes place for different capitals invested successively in the same land, or for capitals invested in various tracts of different classes of soil, cannot alter anything in the differences of fertility, or in the differences of their products, nor in the formation of the differential rent for the more productively invested parts of capital. It is still the soil which shows different fertilities with the same investment of capitals, only that in this case the same soil does for a capital successively invested in different portions what different kinds of soil do in the case of differential rent No. I for various equally large portions of social capital invested in them.

If the same capital of 10 pounds sterling, which is shown by Table I to be invested in the shape of separate capitals of 2½ pounds sterling by different tenants in one acre of each of the soils A, B, C and D, were invested successively in one and the same acre D, so that its first investment yielded 4 quarters, the second 3 quarters, the third 2 quarters and the fourth 1 quarter (or vice versa), then the price of the 1 quarter, which is furnished by the least productive capital, namely the price of 3 pounds sterling, would not pay any differential rent, but would determine the price of production, so long as the supply of wheat with a price of production of 3 pounds sterling would be needed. And since our assumption is that the capitalist mode of production prevails, so that the price of 3

pounds sterling includes the average profit made by a capital of $2\frac{1}{2}$ pounds sterling generally, the other three portions of capital of $2\frac{1}{2}$ pounds sterling each will make surplus profits according to the difference of their product, since this product is not sold at their own price of production, but at the price of production of the least productive investment of $2\frac{1}{2}$ pounds sterling, which does not pay any rent and whose price of production is determined by the general law of prices of production. The formation of the surplus profits would be the same as in Table I.

We see here once more that differential rent No. II is conditioned upon differential rent No. I. The minimum product raised by a capital of $2\frac{1}{2}$ pounds sterling upon the worst soil is here assumed to be 1 quarter. Take it then that the tenant using soil of class D invests in this same soil, aside from the $2\frac{1}{2}$ pounds sterling which raise 4 quarters and pay a differential rent of 3 quarters, still another capital of $2\frac{1}{2}$ pounds sterling, which raise only 1 quarter, like the same capital upon the worst soil A. This would be a rentless investment, which would pay him only the average profit. There would be no surplus profit, which could be converted into rent. On the other hand, this decreasing yield of the second investment of capital in D would not have any influence on the rate of profit. It would be the same as though $2\frac{1}{2}$ pounds sterling had been invested in another acre of the soil of class A, a circumstance which would in no way affect the surplus profit, nor for that reason the differential rent of the classes A, B, C, and D. But for the tenant this additional investment of $2\frac{1}{2}$ pounds sterling in D would have been quite as profitable as the investment of the original $2\frac{1}{2}$ pounds sterling had been per acre of D, according to our assumption, although this had raised 4 quarters. Furthermore, if two other investments of $2\frac{1}{2}$ pounds sterling each should yield an additional product of 3 quarters and 2 quarters respectively, another decrease would have taken place compared with the product of the first investment of $2\frac{1}{2}$ pounds sterling in D, which amounted to 4 quarters and paid a surplus profit of 3 quarters. But it would be merely a decrease in

the amount of surplus profit, and would not affect either the average profit or the regulating price of production. It would have such an effect only if the additional production yielding this decreasing surplus profit should make the production upon A superfluous and throw class A out of cultivation. In that case the decreasing fertility of the additional investments of capital in class D would be accompanied by a fall of the price of production, for instance from 3 pounds sterling to $1\frac{1}{2}$ pounds sterling, and the class B would become the rentless regulator of the market price.

The product of D would now be $4 + 1 + 3 + 2 = 10$ quarters, whereas it was only 4 quarters formerly. But the price per quarter as regulated by B would have fallen to $1\frac{1}{2}$ pounds sterling. The difference between D and B would be $10 - 2 = 8$ quarters, at $1\frac{1}{2}$ pounds sterling per quarter, or 12 pounds sterling, whereas the money rent in D used to be 9 pounds sterling. This should be noted. Calculated per acre, the amount of the rent would have risen by $33\frac{1}{3}\%$ in spite of the decreasing rate of the surplus profits on the two additional capitals of $2\frac{1}{2}$ pounds sterling each.

We see by this to what highly complicated combinations differential rent in general, and particularly form II coupled with form I, may give rise, whereas Ricardo, for instance, treats it very onesidedly and as a simple matter. One may meet, as in the above case, with a fall of the regulating market price and at the same time with a rise of the rent upon superior soils, so that both the absolute product and the absolute surplus product grow. (In differential rent No. I, in a descending line, the relative surplus product and thus the rent per acre may increase, although the absolute surplus product per acre may remain constant or even decrease.) But at the same time the fertility of the investments of capital made successively in the same soil decreases, although a large portion of them falls upon the superior lands. From a certain point of view — both as concerns the product and the prices of production — the productivity of labor has risen. But from another point of view it has decreased, because the rate of surplus profit and the surplus product per acre de-

crease for the various investments of capital in the same soil.

Differential rent No. II, with a decreasing fertility of the successive investments of capital, would be necessarily accompanied with a rise of the price of production and an absolute decrease of the productivity only in the case that these investments of capital could be made on none but the worst soil A. If one acre of A, which raised with an investment of a capital of 2½ pounds sterling 1 quarter at a price of production of 3 pounds sterling, should raise only a total of 1½ quarters with an additional investment of 2½ pounds sterling, or a total investment of 5 pounds sterling, then the price of production of this 1½ quarter would be 6 pounds sterling, or that of one quarter 4 pounds sterling. Every decrease of the productivity with a growing investment of capital would imply a relative decrease of the product per acre in such a case, whereas it would signify only a decrease of the surplus product upon superior soils.

The nature of the matter will carry with it the fact that with the development of intensive culture, i. e., with successive investments of capital upon the same soil, mainly the superior soils will show this tendency, or will show it to a greater degree. (We are not speaking now of permanent improvements, by which a hitherto useless soil is converted into useful soil.) The decreasing fertility of the successive investments of capital must, therefore, have principally the effect indicated above. The better soil is chosen, because it offers the best prospects that the capital invested in it will be profitable, since this soil contains the greater quantity of the useful elements of fertility, which need but be utilised.

When after the abolition of the corn laws the cultivation in England was made still more intensive, a great deal of the former wheat land was used for other purposes, particularly for cattle pastures, while the tracts best adapted to wheat and fertile were drained and otherwise improved. The capital for wheat culture was thus concentrated into a more limited area.

In this case — and all possible surplus rates between the highest surplus product of the best soil and the product of

the rentless soil A coincide here, not with a relative, but with an absolute increase of the surplus product per acre — the newly formed surplus profit (eventually rent) does not represent a portion of a former average profit converted into rent (not a portion of the product in which the average profit formerly incorporated itself) but an additional surplus profit, which converted itself out of this form into rent.

Only in the case in which the demand for cereals would increase to such an extent, that the market price would rise above the price of production of A, so that for this reason the surplus product of A, B, or any other class of soil could be supplied only at a higher price than 3 pounds sterling, would the decrease of the results of an additional investment of capital in A, B, C and D be accompanied by a rise of the price of production and of the regulating market price. To the extent that this would last for a certain length of time without calling forth the cultivation of additional soil (which should be at least of the quality of A), or without bringing on a cheaper supply through other circumstances, wages would rise in consequence of the dearness of bread, other circumstances remaining the same, and the rate of profit would fall accordingly. In this case it would be immaterial, whether the increased demand would be satisfied by drawing upon inferior soil than A, or by additional investments of capital, no matter upon which of the four classes of soil. Differential rent would then rise in connection with a falling rate of profit.

This one case, in which the decreasing fertility of additional capitals invested in already cultivated soils may lead to an increase of the price of production, a fall in the rate of profit, and a formation of higher differential rents — for this rent would rise under the given circumstances upon all classes of soil just as though inferior soil than A were regulating the market — has been stamped by Ricardo as the only case, the normal case, to which he reduces the entire formation of differential rent No. II.

This would also be the case, if only the class A of soils were cultivated, and if successive investments of capital upon it

were not accompanied by a proportional increase of the product.

Here then differential rent No. I is entirely lost sight of when analysing differential rent No. II.

With the exception of this case, in which the supply from the cultivated classes of soil is insufficient, so that the market price stands continually higher than the price of production, until new soil of an inferior character is taken under cultivation in addition to the others, or until the total product of the additional capitals invested in the various classes of soil can be supplied only at a higher price of production than the hitherto customary one, with the exception of this case the proportional decrease in the productivity of the additional capitals leaves the regulating price of production and the rate of profit unchanged. For the rest three cases are possible.

a) If the additional capital upon any one of the classes of soil A, B, C or D yields only the rate of profit determined by the price of production of A, then no surplus profit, and therefore no rent, is formed, any more than there would be, if additional soil of the A class had been cultivated.

b) If the additional capital yields a larger product, then a new surplus profit (potential rent) is, of course, formed, provided the regulating price remains the same. This is not necessarily the case, namely it is not the case when this additional production throws the soil A out of cultivation and thus out of the succession of the competing soils. In this case the regulating price of production falls. The rate of profit would rise, if a fall in wages were connected with this, or if the cheaper product were to enter into the constant capital as one of its elements. If the increased productivity of the additional capital had taken place upon the best soils C and D, it would depend entirely upon the degree of the increased productivity and the mass of the additional capitals to what extent a formation of increased surplus profit (and thus increased rent) would be connected with the fall in prices and the rise of the rate of profit. This rate may also rise without a fall in wages, by a cheapening of the elements of constant capital.

c) If the additional investment of capital takes place with decreasing surplus profits, but in such a way that the product of such additional investment still leaves a surplus above the product of the same capital in A, a new formation of surplus profits takes place under all circumstances, unless the increased supply throws the soil A out of cultivation. This new formation of surplus profit may take place simultaneously upon all four soils, D, C, B and A. But if the worst soil A is crowded out of cultivation, then the regulating price of production falls, and it will depend upon the proportion between the reduced price of 1 quarter and the increased number of quarters yielding a surplus profit, whether the surplus profit expressed in money, and consequently the differential rent, shall rise or fall. But at any rate we meet here with the peculiarity, that in spite of decreasing surplus profits of successive investments of capital the price of production may fall, instead of rising, as it seems it ought to do at first sight.

These additional investments of capital with decreasing surplus products correspond entirely to the case, in which four new and separate capitals would be invested in soils having a fertility ranging between A and B, B and C, C and D, for instance four capitals of $2\frac{1}{2}$ pounds sterling each and yielding $1\frac{1}{2}$, $2\frac{1}{3}$, $2\frac{2}{3}$, and 3 quarters respectively. Surplus profits (potential rents) would form upon all these kinds of soil for all four additional capitals, although the rate of surplus profit, compared with the surplus profit of the same investment of capital, on the corresponding better soil, would have decreased. And it would be immaterial, whether these four capitals were invested in D, etc., or distributed between D and A.

We now come to one essential difference between the two forms of differential rent.

With a constant price of production and constant differences, the rental and the average rent per acre, or the average rent per capital, may rise under differential rent No. I. But the average is a mere abstraction. The actual amount of the

rent, calculated per acre or per capital, remains the same here.

On the other hand, under the same conditions, the amount of the rent calculated per acre may rise, although the rate of rent, measured by the invested capital, remains the same.

Let us assume that production is doubled by the investment of 5 pounds sterling in each of the soils A, B, C and D instead of $2\frac{1}{2}$ pounds sterling, a total of 20 pounds sterling instead of 10 pounds sterling, with the relative fertilities unchanged. This would be the same as though 2 acres instead of 1 were being cultivated, with the same cost, on each one of these classes of soil. The rate of profit would remain the same, also its ratio to the surplus profit or the rent. But if A were raising 2 quarters now, and B, 4, C, 6, D, 8, the price of production would nevertheless remain at 3 pounds sterling per quarter because this increment is not due to a doubled fertility of the same capital, but to the same proportional fertility of a doubled capital. The two quarters of A would now cost 6 pounds sterling, just as one quarter used to cost 3 pounds sterling. The profit would have doubled on all four classes of soils, but only because the invested capital did. But in the same proportion the rent would also have become doubled. It would now be two quarters for B instead of one, four for C instead of two, and six for D instead of three. And corresponding to this the money rent for B, C, and D would now be 6 pounds sterling, 12 pounds sterling, and 18 pounds sterling respectively. Like the product per acre, so the rent in money per acre would be doubled, and consequently the price of the land also, in which this rent is capitalised. If calculated in this manner, the amount of the rent in grain and money rises, and thus the price of land, because the standard by which the calculation is made, the acre, is a tract of a constant magnitude. On the other hand, calculating it as the rate of rent on the invested capital, no change has taken place in the proportional amount of the rent. The total rental of 36 is proportioned to the invested capital of 20 as the rental of 18 was proportioned to the invested capital of 10. The same holds good for the ratio of the money rent of all

classes of soil to the capital invested in them, for instance, 12 pounds sterling of rent in C are proportioned to 5 pounds sterling of capital, as 6 pounds sterling of rent used to be proportioned to 2½ pounds sterling of capital. No new differences arise here between the invested capitals, but new surplus profits arise, because the additional capital is invested in one of the rent paying soils, or in all of them, with the same proportional product. If this double investment were made only in one of these soils, for instance in C, the differential rent, calculated per capital, would remain the same between C, B, and D. For while its mass is doubled in C, so is the invested capital.

This shows that the amount of rent in products and money, and with it the price of the land, may rise while the price of production, the rate of profit, and the differences of fertility remain unchanged (and with them remain unchanged the rate of surplus profit or the rent, calculated on the capital).

The same may take place with decreasing rates of surplus profits and of rent, that is, with a decreasing productivity of the rent paying additional investments of capital. If the second investments of capital of 2½ pounds sterling had not doubled the product, but B would raise only 3½ quarters, C, 5 quarters, and D, 6 quarters, then the differential rent for the second capital of 2½ pounds sterling in B would be only ½ quarter instead of one quarter, in C, one quarter instead of two, and in D, two quarters instead of three. The proportions between rent and capital for the two successive investments would then be as follows:

First Investment	Second Investment
B: Rent 3 p/st., Capital 2 1 2 p/st.	Rent 1 1 2 p/st., Capital 2 1/2 p/st.
C: Rent 6 p/st., Capital 2 1 2 p/st.	Rent 3 p/st., Capital 2 1/2 p/st.
D: Rent 9 p/st., Capital 2 1 2 p/st.	Rent 6 p/st., Capital 2 1/2 p/st.

In spite of this decreased rate of the relative productivity of capital and thus of surplus profit, calculated per capital, the rent in grain and money would have risen in B from one to one and a half quarter (from 3 to 1½ pounds sterling), in C, from two quarters to three (from 6 pounds sterling to 9 pounds sterling), and in D, from three quarters to five (from

9 pounds sterling to 15 pounds sterling). In this case the differences for the additional capitals, compared with the capital invested in A, would have decreased, the price of production would have remained the same, but the rent per acre, and consequently the price of the land per acre, would have risen.

The combinations of differential rent No. II, which are conditioned upon differential rent No. I as their basis, are analysed in the following chapters.

CHAPTER XLI.

DIFFERENTIAL RENT II.— FIRST CASE: CONSTANT PRICE OF PRODUCTION.

This assumption implies that the market price is regulated the same as ever by the capital invested in the worst soil A.

1) If the additional capital invested in any one of the rent paying soils B, C, D produces no more than the same capital upon the soil A, in other words, if it pays only the average profit by means of the regulating price of production, but no surplus profit, then the effect upon the rent is nil. Everything remains as it is. It is the same as though any number of acres of the A quality, of the worst soil, had been added to the cultivated area.

2) The additional capital brings forth upon every one of the different soils additional products proportional to their magnitude; in other words, the volume of production grows according to the specific fertility of every class of soil, in proportion to the magnitude of the additional capital. We started out in chapter XXXIX from the following Table I:

Class of Soil	Acres	Capital P st.	Profit P st.	Cost of Prod. P st.	Product Qrs.	Selling Price P st.	Yield P/st.	Rent		Rate of Surplus Profit
								Qrs.	P/st.	
A	1	2 1 2	1 2	3	1	3	3			0%
B	1	2 1 2	1 2	3	2	3	6	1	3	120%
C	1	2 1/2	1 2	3	3	3	9	2	6	240%
D	1	2 1/2	1 2	3	4	3	12	3	9	360%
Totals	4	10		12	10		30	6	18	

This table is now transformed into *Table II.*

Class of Soil	Acres	Capital P. st.	Profit P. st.	Cost of Prodc'n P. st.	Product Qrs.	Selling Price P. St.	Yield P st.	Rent		Rate of Surplus Profit
								Qrs.	P.st	
A	1	2 1/2 + 2 1/2 = 5	1	6	2	3	6			
B	1	2 1/2 + 2 1/2 = 5	1	6	4	3	12	2	6	120%
C	1	2 1/2 + 2 1/2 = 5	1	6	6	3	18	4	12	240%
D	1	2 1/2 + 2 1/2 = 5	1	6	8	3	24	6	18	360%
Total	4	20			20		60	12	36	180%

It is not necessary in this case that the investment of capital should be doubled in all classes of soil, as it does in this Table. The law is the same, so long as additional capital is invested in one, or several, of the rent paying soils, no matter in what proportion. It is only necessary that production should increase upon every kind of soil in the same ratio as the capital. The rent rises here merely in consequence of an increased investment of capital in the soil, and in proportion to this increase. This increase of the product and of the rent in consequence of, and proportionately to, the increased investment of capital is just the same, so far as the quantity of the product and of the rent is concerned, as though the cultivated area of the rent paying lands of the same quality had been increased and taken under cultivation with the same investment of capital as that previously invested in the same classes of land. In the case of Table II, for instance, the result would remain the same, if the additional capital of 2½ pounds sterling per acre were invested in one additional acre each of B, C and D.

This assumption, furthermore, does not imply a more productive investment of capital, but only an investment of more capital upon the same area with the same success as before.

All proportional relations remain the same here. True, if we do not consider the proportional differences, but the purely arithmetical ones, then the differential rent may change upon the various classes of soil. Let us assume, for instance, that the additional capital has been invested only in B and D. In that case the difference between D and A is 7 quarters, whereas it was only 3 before; the difference between B and A is 3 quarters, whereas it was one; that be-

tween C and B is minus one, whereas it was plus one, etc. But this arithmetical difference, which is decisive in differential rent I, so far as it expresses the difference of productivity with equal investments of capital, is here quite immaterial, because it is a consequence of different additional investments, or of no additional investments, of capital, while the difference for each aliquot part of capital upon the various lands remains unchanged.

3) The additional capitals bring forth surplus products and thus form surplus profits, but at a decreasing rate, not in proportion to their increase. *Table III.*

Class of Soil	Acres	Capital P. st.	Profit P. st.	Cost of Prod'n P. st.	Product Qrs.	Sell-Price P. st.	Yield P. st.	Rent		Rate of S'rpls profit
								Qrs.	P. st.	
A	1	2½	½	3	1	3	3	0	0	0%
B	1	2½ + 2½ = 5	1	6	2 + 1½ = 3½	3	10½	1½	4½	90%
C	1	2½ + 2½ = 5	1	6	3 + 2 = 5	3	15	3	9	180%
D	1	2½ + 2½ = 5	1	6	4 + 3½ = 7½	3	22½	5½	16½	330%
		17½	3½	21	17		51	10	30	

In the case of this third assumption it is again immaterial, whether the additional second investments of capital are uniformly distributed over the various classes of soil or not; whether the decreasing production of surplus profit proceeds in equal or unequal proportions; whether the additional investments of capital fall all of them upon the same rent paying class of soil, or whether they are distributed equally or unequally over soils of different quality paying rent. All these circumstances are immaterial for the law which we are developing here. The only premise is that additional investments of capital must yield a surplus profit upon any one of the rent paying soils, but in a decreasing ratio to the amount of the increase of capital. The limits of this decrease move in the above illustration of Table III between 4 quarters = 12 p.st., the product of the first investment of capital upon the best soil D, and 1 quarter = 3 p.st., the product of the same investment of capital upon the worst soil A. The product of the best soil on the first investment of capital forms the maximum boundary, and the product of the same investment of capital in the worst soil A, which

pays no rent and yields no surplus profit, forms the minimum limit of the product, which the successive investments of capital yield upon any of the various classes of soils producing a surplus profit with successive investments of capital and a decreasing productivity. Just as assumption No. II corresponds to a condition, in which new pieces of the same quality are added to the cultivated area among the superior soils, so that the quantity of any one of the cultivated soils is increased, so assumption No. III corresponds to a condition, in which additional pieces of soil are cultivated in such a way that their various degrees of fertility are distributed among soils between D and A, among soils from the best to the worst kind. If the successive investments of capital take place exclusively upon the soil D, they may include the existing differences between D and A, likewise those between D and C and those between D and B. If all the successive investments are made upon soil C, they will comprise only differences between C and A and C and B; if made exclusively upon B, only differences between B and A.

But this is the law: That the rent increases absolutely upon all these classes of soil, although not in proportion to the additional capital invested.

The rate of surplus profit, considering both the additional capital and the total capital invested in the soil, decreases; but the absolute magnitude of the surplus profit increases. In like manner the decreasing rate of profit on capital in general is generally accompanied by an absolutely increasing mass of profit. Thus the average surplus profit of the investment of capital upon B amounts to 90% on the capital, whereas it amounted to 120% on the first investment of capital. But the total surplus profit increases from one quarter to one and a half quarter, or from 3 pounds sterling to 4½ pounds sterling. Considering the total rent by itself — and not comparing it with the doubled magnitude of the advanced capital — it has risen absolutely. The differences of the rents of the various kinds of soil and their relative proportions may vary here; but this variation in the differences is

here a consequence, not a cause, of the increase of the rents compared to one another.

4) The case, in which the additional investments of capital upon the superior soils bring forth a greater product than the original ones, requires no further analysis. It is a matter of course that under this assumption the rent per acre will rise, and will do so at a greater rate than the additional capital, no matter upon which kind of soil the investment may have been made. In this case the additional investment of capital is accompanied by improvements. This includes the case, in which an additional investment of less capital produces the same or a greater result than did formerly an investment of more capital. This case is not quite identical with the former one, and this is a distinction, which is important in all investments of capital. For instance, if 100 make a profit of 10, and 200, employed in a certain form, make a profit of 40, then the profit has risen from 10% to 20%, and to that extent it is the same as though 50, employed in a more effective form, make a profit of 10 instead of 5. We assume here that the profit is combined with a proportional increase of the product. But the difference is this, that I must double the capital in the one case, whereas in the other I produce the double effect by the same capital. It is by no means the same whether I bring forth the same product as before with half as much living and materialized labor, or twice the product as before with the same labor, or four times the former product with twice the labor. In the first case, labor in a living or materialised form is released, which may be employed otherwise; the power to dispose of capital and labor increases. The release of capital (and labor) is in itself an augmentation of wealth; it has just the same effect as though this additional capital had been obtained by accumulation, but it saves the labor of accumulation.

Take it that a capital of 100 has produced a product of ten yards. The 100 may include both constant capital, living labor and profit. In that case one yard costs 10. Now

if I can produce 20 yards with the same capital of 100, then one yard costs 5. On the other hand, if I can produce 10 yards with a capital of 50, then one yard likewise costs 5, and a capital of 50 is released, assuming the former supply of commodities to be sufficient. Again, if I have to invest 200 of capital in order to produce 40 yards, then one yard also costs 5. The determination of the value, or price, does not indicate such differences as these, neither does the mass of products proportional to the investment of capital. But in the first case, capital is released; in the second case additional capital is saved to the extent that a duplication of production would be required; in the third case the increased product can be obtained only by an augmentation of the invested capital, although not in the same proportion as it would be if the increased product had to be supplied by the old productive power. (This belongs in Part I.)

From the point of view of capitalist production the employment of constant capital is always cheaper than that of variable capital, not where it is a question of increasing the surplus-value, but of reducing the cost price. For a saving of costs even in the element creating the surplus-value, labor, performs this service for the capitalist and makes profit for him, so long as the regulating price of production remains the same. This presupposes in fact the existence of a development of credit and of an abundance of loan capital corresponding to the capitalist mode of production. On the one hand I employ 100 pounds sterling of additional constant capital, if 100 pounds sterling are the product of five laborers during one year; on the other hand, 100 pounds sterling in variable capital. If the rate of surplus-value is 100%, then the value created by those five laborers is 200 pounds sterling; on the other hand, the value of 100 pounds sterling of constant capital is 100 pounds sterling, or perhaps 105 pounds sterling in its capacity as loan capital, if the rate of interest is 5%. The same sums of money express largely different values in product, according to whether they are advanced to production as values of constant or variable capital. Furthermore, as concerns the cost of the commodities from

the point of view of the capitalist, there is also this difference that of 100 pounds sterling of constant capital only the wear and tear passes into the value of the product to the extent that this money is invested in fixed capital, whereas 100 pounds sterling invested in wages pass wholly into the values of commodities and must be reproduced in them.

In the case of colonists and of independent small producers in general, who have no command at all over capital or at least command it only at a high rate of interest, that part of the product which stands in place of wages is their revenue, whereas it constitutes an investment of capital for the capitalist. The colonist, therefore, regards this expenditure of labor as the indispensable prerequisite of his product, which is the thing that interests him first of all. As for his surplus-labor, after deducting that necessary labor, it is evidently realised in a surplus-product; and as soon as he can sell this, or even use it for himself, he looks upon it as something that cost him nothing, because it cost him no materialised labor. It is only the expenditure of materialised labor which appears to him as an outlay of wealth. Of course, he tries to sell as high as possible; but even a sale below value and below the capitalist price of production still appears to him as a profit, unless this profit is claimed beforehand by debts, mortgages, etc. But for the capitalist the investment of both variable and constant capital represents an outlay of capital. The relatively larger outlay of the capitalist reduces the cost-price, and in fact the value of commodities, provided other circumstances remain the same. Hence, although the profit arises only from surplus-labor, consequently only from the employment of variable capital, still it may seem to the individual capitalist that living labor is the most expensive element of his cost of production, which should be reduced to a minimum above all others. This is but a capitalistically distorted form of the correct view that the relatively greater use of past labor, compared to living labor, signifies an increase in the productivity of social labor and a greater social wealth. From the point of view of competition, everything appears thus distorted and inverted.

Assuming the prices of production to remain unchanged, additional investments of capital may be made with an unaltered, an increasing, or a decreasing productivity upon the better soils, that is upon all soils from B upward. Upon soil A this would be possible, under the conditions assumed by us, only in the case that productivity should remain the same, in which case this land continues to pay no rent, or in the case that productivity increases in which case a portion of the capital invested in A would produce rent, while the remainder would not. But it would be impossible, if the productivity upon A were to decrease, for in that case the price of production would not remain unchanged, but would rise. But under all these circumstances the surplus-product and the surplus-profit corresponding to it increases per acre, and with them eventually the rent, in grain or in money, regardless of whether the surplus-product yielded by them is proportional to their magnitude, or above or below this proportion, regardless of whether the rate of the surplus-profit of capital remains constant, rises or falls when this capital increases. The growth of the mere mass of surplus-profit, or of the rent calculated per acre, that is, an increasing mass calculated on the same unaltered unit, in the present case on a definite quantity of land, such as an acre or an hectare, expresses itself as an increasing ratio. Hence the magnitude of the rent, calculated per acre, increases under such circumstances simply in consequence of the increase of the capital invested in the soil. This takes place when the prices of production remain the same, no matter whether the productivity of the additional capital stays unaltered, or decreases, or increases. These last named circumstances modify the volume, in which the level of the rent per acre rises, but not the fact of this increase itself. This is a phenomenon, which is peculiar to differential rent No. II and distinguishes it from differential rent No. I. If the additional investments of capital, instead of being made successively one after another upon the same soil, were made side by side upon new additional soil of the corresponding quality, the mass of the rental would have increased, and, as previously shown, the average rent of the cul-

tivated total area would likewise have increased, but not the size of the rent per acre. When results remain the same so far as the mass and value of the total production and of the surplus product are concerned, the concentration of capital upon a smaller area of land develops the size of the rent per acre, whereas its distribution over a larger area, under the same circumstances, and other circumstances remaining the same, does not produce this effect. But the more the capitalist mode of production develops, the more develops also the concentration of capital upon the same area of land, and the higher rises the rent calculated per acre. Consequently, if we have two countries, in which the prices of production are identical, the differences of the various kinds of soil the same, and the same amount of capital invested, but in such a way that the investment is made in the form of successive outlays upon a limited area in one country, whereas in the other country it is made more in the shape of co-ordinated outlays upon a wider area, then the rent per acre, and with it the price of land, would be higher in the first and lower in the second country, although the mass of the rent would be the same in both countries. The difference in the size of the rent could not be explained in such a case out of the natural fertility of the various kinds of soil, nor out of the quantity of employed labor, but solely out of the different ways in which the capital is invested.

In speaking of a surplus-product in this case, we mean that aliquot part of the product, in which the surplus-profit presents itself. Ordinarily we mean by surplus-product that portion of the product, in which the total surplus-value is materialised, or in some cases that portion, in which the average profit presents itself. The specific significance, which this term assumes in the case of rent-paying capital, gives rise to misunderstanding, as we have shown in another place.

CHAPTER XLII.

DIFFERENTIAL RENT II.— SECOND CASE: FALLING PRICE OF PRODUCTION.

The price of production may fall, when the additional investments of capital take place with an unaltered, a falling, or a rising rate of productivity.

I. *The Productivity of the Additional Investment of Capital Remains the Same.*

In this case the assumption is that the product increases in the same proportion as the capital invested in the various soils and in accordance with their respective qualities. This implies, always assuming the differences of the various soil to remain unaltered, that the surplus-product increases in proportion to the increased investment of capital. This case, then, excludes any additional investment of capital upon soil A which might affect the differential rent. Upon this soil the rate of surplus-profit is 0; it remains 0, since we have assumed that the productive power of the additional capital and therefore the rate of surplus-profit remain the same.

But under these conditions the regulating price of production can fall only, because instead of the price of production of A that of the next best soil B, or of any better soil than A, becomes the regulator; so that the capital is withdrawn from A, or perhaps from B and A, in case the price of production of C should become the regulating one and all inferior soil should be eliminated from the competition of the wheat raising soils. The prerequisite for this would be, under the assumed conditions, that the additional product of the additional investments of capital should satisfy the demand, so

that the product of the inferior soils A, etc., would become superfluous for the formation of a full supply.

Take, for instance, Table II, but in such a way that 18 quarters instead of 20 will satisfy the demand. Soil A would drop out; D and its price of production of 30 shillings would become regulating. In that case the differential rent would assume the following form:

Table IV.

Soils	Acres	Capital £	Profit £	Cost of Production £	Product Quarters	Selling Price Per Quarter £	Yield P/st.	Rent		Rate of Surplus Profit
								in grain Qrs.	in money £	
B	1	5	1	6	4	1½	6	0	0	0
C	1	5	1	6	6	1½	9	2	3	60%
D	1	5	1	6	8	1½	12	4	6	120%
T'ls	3	15	3	18	18		27	6	9	60%

In other words, compared to Table II the ground-rent would have fallen in money from 36 pounds sterling to 9 pounds sterling and in grain from 12 quarters to 6 quarters, whereas the total output would have fallen only by 2, from 20 to 18. The rate of surplus-profit, calculated on the capital, would have fallen by two-thirds, from 180% to 60%. The fall of the price of production in this case is accompanied by a decrease of the rent in grain and money.

Compared to Table I there is merely a decrease in the money rent; the rent in grain in both cases is 6 quarters. But in the one case these bring 18 pounds sterling, in the other only 9 pounds sterling. So far as the soils C and D are concerned, the rent in grain compared to Table I remains the same. In fact, owing to the additional production put forth by the uniformly working additional capital, the product of A has been pushed out of the market, the soil A has been eliminated from the competition of the producing agents, and a new differential rent No. 1 has thus been formed, in which the better soil B plays the same role as formerly the inferior soil A. Consequently the rent of B disappears on the one side; on the other side nothing has been altered in the differences

of B, C and D by the investment of additional capital, according to our assumption. For this reason that part of the product, which is converted into rent, is reduced.

If the above result, the satisfaction of the demand with A left out, should have been accomplished by the investment of more than double the capital upon C or D, or upon both, then the matter would assume a different aspect. Let us suppose, that a third investment of capital is made upon C.

Table IV a.

Soils	Acres	Capital £	Profit £	Cost of Production £	Product Qrs.	Selling Price £	Yield £	Rent		Rate of Surplus Profit
								Grain Qrs.	Money £	
B	1	5	1	6	4	1½	6	0	0	0
C	1	7½	1½	9	9	1½	13½	3	4½	60%
D	1	5	1	6	8	1½	12	4	6	120%
T'ls	3	17½	3½	21	21		31½	7	10½	

In this case, compared to Table IV, the product of C has risen from 6 quarters to 9, the surplus product from 2 quarters to 3, the money rent from 3 pounds sterling to 4½ pounds sterling. Compared to Table II, in which the money rent was 12 pounds sterling, and Table I, in which it was 6 pounds sterling, it has fallen off. The total rental in grain is 7 quarters. It has fallen compared to Table II, in which it was 12 quarters, but has risen compared to Table I, in which it was 6 quarters. In money the rent is 10½ pounds sterling and has fallen compared to both of the other Tables, in which it was 18 and 36 pounds sterling respectively.

If the third investment of capital, amounting to 2½ pounds sterling, had been applied to soil B, it would indeed have altered the quantity of production, but would not have touched the rent, since the successive investments, according to our assumption, do not produce any differences upon the same soil, and soil B does not produce any rent.

Again, if we assume that the third investment of capital takes place upon D instead of C, we get

Table IV b.

Sois	Acres	Capital £	Profit £	Cost of Production £	Product Qrs.	Selling Price £	Rent			Rate of Surplus Profit
							Yield £	Qrs.	£	
B	1	5	1	6	4	1½	6	0	0	0
C	1	5	1	6	6	1½	9	2	3	60%
D	1	7½	1½	9	12	1½	18	6	9	120%
T'ls	3	17½	3½	21	22		33	8	12	

Here the total product is 22 quarters, more than double that of Table I, although the invested capital is only 17½ pounds sterling as against 10 pounds sterling, in other words, not twice the size. The total product is also larger by 2 quarters than that of Table II, although the capital in it is larger, namely 20 pounds sterling.

Compared to Table I, the rent in grain upon soil D has increased from 2 quarters to 6, whereas the money rent has remained the same, 9 pounds sterling. Compared to Table II the grain rent of D is the same, namely 6 quarters, but the money rent has fallen from 18 pounds sterling to 9 pounds sterling.

Comparing the total rents, the grain rent of IV b is 8 quarters, larger than that of I which is 6 and than that of IV a which is 7 quarters; but it is smaller than that of II which is 12 quarters. The money rent of IV b, 12 pounds sterling, is larger than that of IV a, which is 10½ pounds sterling, and smaller than that of Table I, which is 18 pounds sterling and that of Table II, which is 36 pounds sterling.

In order that the total rental under the conditions of Table IV b, after the elimination of the rent upon B, may be equal to that of Table I, we need 6 pounds sterling of surplus product more, that is, 4 quarters at 1½ pounds sterling, which is the new price of production. Then we shall have once more a total rental of 18 pounds sterling, the same as in Table I. The magnitude of the required additional capital will differ, according to whether we invest it upon C or D, or distribute it between these two.

In the case of C 5 pounds sterling of capital result in a

surplus product of 2 pounds sterling, consequently 10 pounds sterling of additional capital will result in 4 quarters of additional surplus product. In the case of D 5 pounds sterling of additional capital would suffice for the purpose of producing 4 quarters of additional grain rent, under the conditions assumed here, namely that the productivity of the additional investments of capital will remain the same. We should then get the following Tables:

Table IV c.

Soils	Acres	Capital £	Profit £	Cost of Prod'n £	Product Qrs.	Selling Price £	Yield £	Rent		Rate of Surplus Profit
								Qrs.	£	
B	1	5	1	6	4	1½	6	0	0	0
C	1	15	3	18	18	1½	27	6	9	60%
D	1	7½	1½	9	12	1½	18	6	9	120%
T't'ls	3	27½	5½	33	34		51	12	18	$65^5/_{11}$%

Table IV d.

Soils	Acres	Capital £	Profit £	Cost of Production £	Product Qrs.	Selling Price £	Yield £	Rent		Rate of Surplus Profit
								Qrs.	£	
B	1	5	1	6	4	1½	6	0	0	0
C	1	5	1	6	6	1½	9	2	3	60%
D	1	12½	2½	15	20	1½	30	10	15	120%
Totals	3	22½	4½	27	30		45	12	18	80%

The total money rental would be exactly one-half of what it was in Table II, where the additional capitals were invested under conditions, in which the prices of production remained the same.

The most important thing is to compare the above Tables with Table I.

We find that the total money rental has remained the same, namely 18 pounds sterling, while the price of production has fallen by one-half, from 60 shillings to 30 shillings per quarter, and that the grain rent has been correspondingly doubled, from 6 quarters to 12. The rent upon B has disappeared; the money rent upon C has risen by one-half in IV c, but fallen by one-half in IV d; upon D the money rent has remained the same, 9 pounds sterling, in IV c, and has risen

from 9 pounds sterling to 15 pounds sterling in IV d. The production has risen from 10 quarters to 34 in IV c, and to 30 quarters in IV d; the profit from 2 pounds sterling to $5\frac{1}{2}$ pounds sterling in IV c and to $4\frac{1}{2}$ pounds sterling in IV d. The total investment of capital has risen in one case from 10 pounds sterling to $27\frac{1}{2}$ pounds sterling, and in the other from 10 pounds sterling to $22\frac{1}{2}$ pounds sterling, in either case by more than one-half. The rate of rent, that is, the rent calculated on the invested capital, is everywhere the same in all the Tables from IV to IV d for the respective kinds of soils, for this was implied by the assumption that every kind of soil should retain the same rate of productivity with the two successive investments of capital. But compared to Table I, this rate has fallen, both for the average of all kinds of soil and for each one of them individually. In Table I it was 180% on an average, whereas in IV c it is $(18 \div 27\frac{1}{2}) \times 100 = 65\frac{5}{11}\%$ and in IV d it is $(18 \div 22\frac{1}{2}) \times 100 = 80\%$. The average money rent per acre has risen. Formerly, in Table I, its average was $4\frac{1}{2}$ pounds sterling per acre upon all four acres, whereas now, in IV c and IV d, it is 6 pounds sterling per acre upon the three acres. Its average upon the rent paying soil was formerly 6 pounds sterling, whereas now it is 9 pounds sterling per acre. Hence the money value of the rent per acre has risen, and represents now double the grain product that it did formerly; but the 12 quarters of grain rent are now less than one-half of the total product of 33 and 27 quarters respectively, whereas in Table I the 6 quarters represent $\frac{3}{5}$ths of the total product of 10 quarters. Consequently, although the rent as an aliquot part of the total product has fallen, and has also fallen when calculated on the invested capital yet its money-value, calculated per acre, has risen and still more its value as a product. If we take soil D in Table IV d, we find that the cost of production expended in it amounts to 15 pounds sterling, of which $12\frac{1}{2}$ pounds sterling are invested capital. The money rent is 15 pounds sterling. In Table I, for the same soil D, the cost of production was 3 pounds sterling, the invested capital $2\frac{1}{2}$ pounds sterling the money rent 9 pounds sterling, that is, the

money rent amounted to three times the cost of production and almost four times the capital. In Table IV d, the money rent for D, 15 pounds sterling, is exactly equal to the cost of production and only by $\frac{1}{5}$th larger than the capital. Nevertheless the money rent per acre is two-thirds larger, namely 15 pounds sterling instead of 9 pounds sterling. In Table I the grain rent of 3 quarters constitutes three quarters of the total product of 4 quarters; in Table IV d it is 10 quarters, or one-half of the total product of 20 quarters of one acre of D. This shows that the money value and grain value of the rent per acre may rise, although it forms a smaller aliquot part of the total yield and has fallen in proportion to the invested capital.

The value of the total product in Table I is 30 pounds sterling. The rent is 18 pounds sterling, more than one-half of it. The value of the total product of IV d is 45 pounds sterling, the rent is 18 pounds sterling, or less than one-half of it.

The reason, why in spite of the fall of the price by $1\frac{1}{2}$ pounds sterling per quarter, a fall of 50%, and in spite of the reduction of the competing soil from 4 acres to 3, the total rent remains the same and the grain rent is doubled, while on a calculation per acre both the grain rent and money rent rise, is that more surplus product is created. The price of grain falls by 50%, the surplus product increases by 100%. But in order to accomplish this result, the total production under the conditions assumed by us must be trebled, and the investment of capital upon the superior soils must be more than doubled. In what proportion this last factor must increase, depends in the first place upon the distribution of the additional investments of capital among the superior and best kinds of soil, always assuming that the productivity of the capital upon every kind of soil increases proportionately to its size.

If the fall of the price of production were smaller, less additional capital would be required for the production of the same money rent. If the supply required for the purpose of throwing soil A out of cultivation — and this depends not

merely upon the product per acre of A, but also upon the proportional share taken by A in the entire cultivated area — were larger, and with it also the amount of additional capital required upon better soils than A, then, other circumstances remaining the same, the money rent and the grain rent would have increased still more, although both of them would disappear upon the soil B.

If the eliminated capital of A had been 5 pounds sterling, we should have to compare Tables II and IV d: The total product would have increased from 20 quarters to 30. The money rent would be only half as large, that is, 18 pounds sterling instead of 36 pounds sterling; the grain rent would be the same, namely 12 quarters.

If a total product of 44 quarters, valued at 66 pounds sterling, could be produced upon D with a capital of 27½ pounds sterling — corresponding to the old rate of D, 4 quarters per 2½ pounds sterling of capital — then the total rental would once more reach the level of Table II, and we should get the following diagram:

Soils	Capital p. st.	Product quarters	Grain Rent quarters	Money Rent p. st.
B	5	4	0	0
C	5	6	3	3
D	27½	44	22	33
Totals	37½	54	25	36

The total production would be 54 quarters as against 20 quarters in Table II, and the money rent would be the same, 36 pounds sterling. But the total capital would be 37½ pounds sterling, whereas it was 20 in Table II. The invested total capital would almost be doubled, while production would be nearly trebled; the grain rent would have been doubled, the money rent would have remained the same. Hence, if the price falls as a result of the investment of additional money-capital, while productivity remains the same, upon the better soils which pay rent, that is, all soils above A, then the total capital has a tendency not to increase in the same proportion as the production and the grain rent; so that the increase of the grain rent may offer

a compensation for the loss in money rent due to the falling price. The same law also manifests itself through the fact that the invested capital must be larger in proportion as it is more largely invested upon C than D, upon the soils paying a smaller rent rather than upon the soils paying a larger rent. The point is simply this: In order that the money rent may remain the same or rise, a certain additional quantity of surplus product must be created, and this requires less capital in proportion as the productivity of the soils yielding a surplus product is greater. If the difference between B and C, C and D were still greater, still less additional capital would be required. The proportion is determined 1) by the proportion in which the price falls, in other words, by the difference between soil B, which is not paying any rent now, and soil A, which formerly was the soil that did not pay any rent; 2) by the proportion between the differences of the better soils from B upward; 3) by the amount of newly invested additional capital, and 4) by its distribution among the different qualities of soil.

In fact, we see that this law expresses merely the same thing which we ascertained already in the case of the first illustration: When the price of production is given, no matter what may be its figure, the rent may increase in consequence of additional investments of capital. For owing to the elimination of A, we have now a new differential rent No. I with B as the worst soil and $1\frac{1}{2}$ pounds sterling per quarter as the new price of production. This applies to Tables IV as well as to Table II. It is the same law, only that we have as a basis soil B instead of A, and a price of production of $1\frac{1}{2}$ pounds sterling instead of 3 pounds sterling.

The important thing here is this: To the extent that so and so much additional capital was necessary for the purpose of withdrawing the capital from soil A and satisfying the supply without it, we find that this may be accompanied by an unaltered, a rising, or a falling rent per acre, if not upon all soils, then at least upon some and so far as the average of the cultivated lands is concerned. We have seen that the

grain rent and the money rent do not maintain a uniform ratio to one another. However, it is merely due to tradition that grain rent is still playing any role at all in political economy. One might demonstrate equally well that a manufacturer can buy much more of his own yarn with his profit of 5 pounds sterling than he could formerly with a profit of 10 pounds sterling. It shows at any rate, that the landlords, when they are at the same time owners or partners of manufacturing establishments, sugar factories, distilleries, etc., may still make a considerable profit even when the money rent is falling, in their capacity as producers of their own raw materials.[127]

II. *The Rate of Productivity of the Additional Capitals Decreases.*

This does not carry anything new into the problem, in so far as the price of production may also fall in this case as in the previously considered one, when additional investments of capital upon better soils than A make the product of A superfluous and withdraw the capital from A, or lead to the employment of A for the production of other things. We have analysed this eventuality exhaustively. We have shown that in this case the rent in grain and money per acre may increase, decrease, or remain unchanged.

For the purpose of easy comparison we reproduce

[127] The above Tables IV a to IV d had to be figured over on account of an error of calculation which ran through all of them. While this did not affect the theoretical conclusions drawn from these Tables, it carried monstrous figures concerning the production per acre into them. Even these would not be objectionable on principle. In all maps showing geographical conditions in relief or giving a view of altitudes in profile it is customary to choose a much larger scale for the vertical than for the horizontal lines. Nevertheless, should any one feel that his agrarian heart is injured thereby, he is at liberty to multiply the number of acres with any figure that will satisfy him. One might also choose 10, 12, 14, 16 bushels (8 bushels = 1 quarter) per acre instead of 1, 2, 3, 4 quarters in Table I, and in that case the figures of the other Tables which are developed out of them would remain within the limits of probability; it will be found that the result, the proportion of increase in the rent compared to the increase in capital, comes to the same thing. This has been done in the following Tables, which were added by the editor.— F. E.

Table I.

Soils	Acres	Capital P. St.	Product P. St.	Cost of Production per Quarter	Product Qrs.	Grain Rent Qrs.	Money Rent P. St.	Rate of Surplus Profit
A	1	2½	½	3	1	0	0	0
B	1	2½	½	1½	2	1	3	120%
C	1	2½	½	1	3	2	6	240%
D	1	2½	½	¾	4	3	9	360%
Totals	4	10			10	6	18	180% Average

Now let us assume that the figure of 16 quarters, supplied by B, C, D, with a decreasing rate of productivity, suffices to throw A out of cultivation. In that case Table III is transformed into the following

Table V.

Soils	Acres	Capital P. St	Profit P. St.	Product quarters	Selling Price P. St	Yield P. St.	Grain Rent Qrs.	Money Rent P. St.	Rate of Surplus Profit
B	1	2½ + 2½	1	2 + 1½ = 3½	1 5/7	6	0	0	0
C	1	2½ + 2½	1	3 + 2 = 5	1 5/7	8 4/7	1 1/2	2 4/7	51 2 5/7%
D	1	2½ + 2½	1	4 + 3½ = 7½	1 5/7	12 6/7	4	6 6/7	137 1 5/7%
Totals	3	15		16		27 3/7	5 1/2	9 3/7	Average 94 3/10

Here the rate of productivity of the additional capitals is decreasing, and the decrease is different upon different soils, while the regulating price of production has fallen from 3 pounds sterling to $1\frac{5}{7}$ pounds sterling. The investment of capital has risen by one-half, from 10 pounds sterling to 15 pounds sterling. The money rent has fallen by almost one-half, from 18 pounds sterling to $9\frac{3}{7}$ pounds sterling, while the grain rent has fallen only by one-twelfth, from 6 quarters to $5\frac{1}{2}$ quarters. The total product has risen from 10 to 16, or by 160%. The grain rent constitutes a little more than one-third of the total product. The advanced capital has a ratio of 15 to $9\frac{3}{7}$ to the money rent, whereas formerly this ratio was 10 to 18.

III. *The Rate of Productivity of the Additional Capitals Increases.*

This differs from Case I in the beginning of this chapter, in which the price of production falls while the rate of productivity remains the same, merely by the fact that soil A is thrown more quickly out of competition, if an increase of the product is required to effect this.

This may work its effects differently, according to the distribution of the investments over the various soils, no matter whether productivity be rising or falling. In proportion as these different effects balance the differences, or accentuate them, the differential rent of the better soils, and with it the total rental, will fall or rise, as we have seen in discussing differential rent No. I. For the rest, everything depends upon the size of the area and of the capital, which are thrown out of competition together with soil A, and upon the relative advance of capital required with a rising productivity for the purpose of supplying the capital which is to cover the demand.

The only point which it is worth while to analyse here, and which alone carries us back to the investigation of the way in which this differential profit is converted into differential rent, is the following:

In the first case, in which the price of production remains the same, the additional capital which may be invested in the soil A is immaterial for the differential rent as such, since this soil A does not yield any rent now any more than it did before, the price of its product remains the same and continues to regulate the market.

In the second case of Variant No. I, in which the price of production falls while the rate of productivity remains the same, soil A will necessarily be thrown out, and still more so in Variant No. II, in which both the price of production and the rate of productivity fall, since otherwise the additional capital upon soil A would have to raise the price of production. But here, in Variant No. III of the second case, in which the price of production falls, because

the productivity of the additional capital rises, this additional capital may eventually be invested upon the soil A as well as upon the better soils.

We will assume that an additional capital of $2\frac{1}{2}$ pounds sterling, when invested upon the soil A, produces $1\frac{1}{5}$ quarter instead of 1 quarter.

Table VI.

Soils	Acres	Capital P. St.	Profit P. St.	Cost of Prod'n P.St	Product Qrs.	Selling Price P. St.	Yield P. St.	Rent		Rate of Surplus Profit
								Qrs.	P. St.	
A	1	2½+2½= 5	1	6	1+1 1.5=2 1 5	2 8/11	6	0	0	0
B	1	2½+2½= 5	1	6	2+2 2.5=4 2 5	2 8.11	12	2 1 5	6	120%
C	1	2½+2½= 5	1	6	3+3 3/5=6 3/5	2 8 11	18	4 2.5	12	240%
D	1	2½+2½= 5	1	6	4+4 4 5=8 4 5	2 8.11	24	6 3/5	18	360%
T'ls	4	20	4	24	22		60	13 1/5	36	Av'rage 240%

This Table VI should be compared with both Basic Tables I and Table II, in which the double investment of capital is combined with a constant productivity proportional to the investment of capital.

According to our assumption the regulating price of production falls. If it were to remain constant, at 3 pounds sterling, then the worst soil which used to pay no rent with an investment of $2\frac{1}{2}$ pounds sterling, would then yield a rent, although no worse soil would have been drawn into cultivation. This would have been accomplished by increasing the productivity of this soil, but only for a part, not for the original capital invested in it. The first 3 pounds sterling of cost of production bring 1 quarter; the second bring $1\frac{1}{5}$ quarter; but the entire product of $2\frac{1}{5}$ quarters is now sold at its average price.

Since the rate of productivity increases with the additional investment of capital, this implies an improvement. This may consist of a general increase of the capital per acre (more fertilizer, more mechanical labor, etc.), or it may be due exclusively to this additional investment that any difference in the quality and productiveness of the investment is brought about. In both cases the investment of 5 pounds sterling of capital per acre brings forth a product of $2\frac{1}{5}$ quarters, whereas

the investment of one-half of this capital, or 2½ pounds sterling, brought forth a product of only 1 quarter. The product of the soil A, leaving aside the question of transient market conditions, could not continue to be sold at a higher price of production instead of at the new average price unless a considerable area of the class A would remain under cultivation with a capital of only 2½ pounds sterling. But as soon as the new scale of 5 pounds sterling of capital per acre would become universal, and with it an improvement of cultivation, the regulating price of production would have to fall to 2 8-11 pounds sterling. The difference between the two portions of capital would disappear, and in that case the cultivation of one acre of soil A with a capital of only 2½ pounds sterling would be abnormal, would not correspond to the new conditions of production. It would then no longer be a difference between the yields of different portions of capital upon the same acre, but between a sufficient and an insufficient investment of capital per acre. This shows, 1), that an insufficient capital in the hands of a large number of capitalist farmers (it must be a large number, for a small number would simply be compelled to sell below their price of production) produces the same effect as a differentiation of soils in a descending line. The inferior cultivation upon inferior soil increases the rent upon the superior soils; it may even create a rent upon better cultivated soil of the inferior kind, which would otherwise yield no rent. It shows, 2), that differential rent, to the extent that it arises from successive investments of capital in the same total area, resolves itself in reality into an average, in which the effects of the different investments of capital are no longer visible and distinguishable, so that the worst soil does not yield any rent, but rather, a), the average price of the total product of, say, one acre of A is made the new regulating price, and, b), the effects of the different investments of capital appear as changes in the total quantity of capital per acre, which is required under the new conditions for the adequate cultivation of the soil, and thus the individual successions of invested capital as well as their respective effects are indistinguishably amalgamated. It is

the same with the individual differential rents of the superior kinds of soil. In every case they are determined by the difference of the average products of the various soils, compared to the product of the worst soil, with the increase of capital which has become the normal one.

No soil yields any product without an investment of capital. Even in the case of simple differential rent, or differential rent No. I, some capital must be invested. When we say that one acre of class A, which regulates the price of production, gives so and so much of a product at that and that price, and that the superior soils B, C and D yield so much differential product and so much money rent at the regulating price of production, it is always understood that a certain amount of capital is invested in A which is normal under the prevailing conditions. In the same way a certain minimum capital is required for every individual line of industry, in order that commodities may be produced at their price of production.

If this minimum is altered in consequence of successive investments of capital which are accompanied by improvements, it is done gradually. So long as a certain number of acres, say, of A, do not receive this additional first capital, a rent is created upon the better cultivated portions of A by the unaltered price of production, and the rent of all superior soils, such as B, C, D, is raised. But as soon as the new method of cultivation has become general enough to be the normal one, the price of production falls; the rent of the superior soils declines then, and that portion of the soil A, which does not enjoy the normal running capital, must sell its product below its individual price of production, and therefore below the average profit.

In the case of a falling price of production this happens also, even assuming the productivity of the additional capital to be decreasing, as soon as the required total product is supplied in consequence of increased investments of capital by the superior classes of soil, so that the running capital is withdrawn, say, from A and A does not compete any longer in the production of this one staple, say wheat. The quan-

tity of capital, which is now required on an average as an investment upon the new regulating soil, B, is now considered the normal one; and when we speak of the different fertility of the soils, it is understood that this new normal quantity of capital is employed per acre.

On the other hand, it is evident that this average investment of capital, for instance 8 pounds sterling per acre in England before 1848, and 12 pounds sterling after that year, will form the standard in the making of leases for land. For any capitalist farmer spending more than that the surplus profit does not assume the form of rent during the time of his contract. Whether this takes place after the expiration of his contract, will depend upon the competition of the capitalist farmers, who are in a position to make the same extra advance. We are not speaking here of such permanent improvements of the soil as continue to guarantee an increased product with the same or with even a decreasing investment of capital. Such improvements, although products of capital, have the same effect as the natural differences of quality of the land.

We see, then, that an element must be considered in the case of differential rent No. II, which does not appear in differential rent No. I as such, since this last rent may continue independently of any change in the normal investment of capital per acre. It is on one hand the obliteration of the results of different investments of capital upon the regulating soil A, the product of which now appears simply as a normal average product per acre. It is on the other hand the change in the average minimum, or in the average magnitude of invested capital per acre, so that this change presents itself as a quality of the soil. It is finally the difference in the manner of transforming surplus profit into the form of rent.

Table VI shows furthermore, compared with Tables I and II, that the grain rent has increased more than double as compared to I, and by $1\frac{1}{8}$ quarters as compared to II; while the money rent has doubled as compared to I, but has not changed as compared with II. It would have increased considerably, if (other conditions remaining the same) the additional capital

had been placed more upon the superior soils, or if the effects of the addition of capital to A had been less appreciable, so that the regulating average price of the quarter from A had stood higher.

If the increase of productivity by means of additional capital should produce different results upon different soils, it would cause a change in their differential rents.

At any rate we have demonstrated, that the rent per acre, for instance with a doubled capital, may not only be doubled, but more than doubled, while the price of production is falling in consequence of an increased rate of productivity of the additional capitals (as soon as the productivity grows at a greater rate than the advance of capital). But it may also fall, if the price of production should fall much lower as a result of a more rapid increase of productivity upon the soil A.

Let us assume that the additional investments of capital, for instance upon B and C, do not increase the productivity as much as they do upon A, so that the proportional differences would decrease for B and C, and the increase of the product did not make up for the fall in price, then, compared to Table II, the rent upon D would rise, and would fall upon B and C:

Table VI a.

Soils	Acres	Capital P. St.	Profit	Product per Acre quarters	Selling Price P St.	Yield P.St.	Grain Rent Qrs.	Money Rent P. St.
A	1	2½ + 2½ = 5	1	1 + 3 = 4	1½	6	0	0
B	1	2½ + 2½ = 5	1	2 + 2½ = 4½	1½	6¾	½	¾
C	1	2½ + 2½ = 5	1	3 + 5 = 8	1½	12	4	6
D	1	2½ + 2½ = 5	1	4 + 12 = 16	1½	24	12	18
Totals	4	20		32½			16½	24¾

Finally, the money rent would rise, if more additional capital were invested upon the superior soils under the same proportional increase of fertility than upon A, or if the additional investments of capital upon the superior soils worked with an increasing rate of productivity. In both cases the differences would increase.

The money rent falls, when the improvement due to addi-

tional investments of capital which reduces the differences all over, or in part, affects A more than B and C. It falls so much the more, the less the productivity of the superior soils increases. It depends upon the proportion of inequality in the effects, whether the grain rent shall rise, fall, or remain stationary.

The money rent rises, and so does the grain rent, assuming the proportional difference in the additional fertility of the different soils to remain unaltered, when more capital is added to the rent paying soils than to the rentless soil A, and more capital placed upon the soils with high than those with low rents, or when the fertility, assuming the same additional capital to be used, increases more upon the better and best soils than upon A, and at that in proportion as this increase in fertility is greater upon the better classes of soil than upon the lesser ones.

But under all circumstances the rent rises relatively, when the increased productive power is a result of an addition of capital, and not merely a result of increased fertility with an unaltered investment of capital. This is the absolute point of view, which shows that here, as in former cases, the rent and the increased rent per acre (as in the case of differential rent I upon the entire cultivated area — the amount of the average rental) are a result of an increased investment of capital in the soil, no matter whether this capital does its work with a constant rate of productivity at constant or decreasing prices, or with a decreasing rate of productivity at constant or falling prices, or with an increasing rate of productivity at falling prices. For our assumption of a constant price with a constant, falling, or rising rate of productivity of the additional capitals, and of a falling price with a constant, falling, or rising rate of productivity, resolves itself into a constant rate of productivity of the additional capital at constant or falling prices, a falling rate of productivity at constant or falling prices, and a rising rate of productivity at constant and falling prices. Although the rent may remain stationary or may fall in all these cases, it would fall more, if the additional investment of capital, other circum-

stances remaining the same; were not a prerequisite of an increased fertility. An addition of capital, then, is always the cause of the relative magnitude of this rent, although it may have decreased absolutely.

CHAPTER XLIII.

DIFFERENTIAL RENT NO. II.— THIRD CASE: RISING PRICE OF PRODUCTION.

[A RISING price of production presupposes that the productivity of the least productive quality of land, which pays no rent, decreases. The regulating price of production cannot rise above 3 pounds sterling per quarter, unless the 2½ pounds sterling invested in soil A produce less than one quarter, or the 5 pounds sterling less than two quarters, or unless, even inferior soil than A has to be taken under cultivation.

If the productivity of the second investment of capital should remain the same, this would be possible only in the case that the productivity of the first investment of capital would have decreased. This case occurs often enough. It happens, for instance, when the top soil, exhausted and superficially plowed, produces inferior crops with the old style of cultivation, and when the subsoil, thrown up by deeper plowing, produces better crops than formerly under a more rational treatment. But strictly speaking this special case does not belong here. The falling off in the productivity of the first investment of 2½ pounds sterling implies for the superior soils, even when conditions with them should be analogous, a decrease of the differential rent No. I; but here we are considering only differential rent No. II. Since the present special case cannot occur without the previous existence of differential rent No. II, but represents in fact a reaction of a certain modification of differential rent No. I upon No. II, we will give an illustration of it.

TABLE VII.

Soils	Acres	Invested Capital P. St.	Profit	Cost of Prod'n P. St.	Product Qrs.	Selling Price P. St.	Yield P. St.	Grain Rent Qrs.	Money Rent P. St.	Rate of Rent
A	1	2½ + 2½	1	6	½ + 1¼ = 1¼	3 3 7	6	0	0	0
B	1	2½ + 2½	1	6	1 + 2½ = 3½	3 3 7	12	1¾	6	120%
C	1	2½ + 2½	1	6	1½ + 3¾ = 5¼	3 3 7	18	3½	12	240%
D	1	2½ + 2½	1	6	2 + 5 = 7	3 3/7	24	5¼	18	360%
T'tl		20			17½		60	10½	36	Av'rage 240%

The money rent, and the yield in money, are the same as in Table II. The increased regulating price of production makes up exactly for what has been lost in the quantity of the product; since both of them vary in an inverse proportion, it is a matter of course that the product of both will remain the same.

In the above case we had assumed that the productive power of the second investment of capital was higher than the original productivity of the first investment. The matter remains the same, if we assume that the second investment has only the same productivity as that of the first, as shown in the following:

TABLE VIII.

Soils	Acres	Invested Capital P. St.	Profit P. St.	Cost of Product'n P. St.	Product Qrs.	Selling Price P. St.	Yield P. St.	Grain Rent Qrs.	Money Rent P. St.	Rate of Surplus Profit
A	1	2½ + 2½ = 5	1	6	½ + 1 = 1½	4	6	0	0	0
B	1	2½ + 2½ = 5	1	6	1 + 2 = 3	4	12	1½	6	120%
C	1	2½ + 2½ = 5	1	6	1½ + 3 = 4½	4	18	3	12	240%
D	1	2½ + 2½ = 5	1	6	2 + 4 = 6	4	24	4½	18	360%
		20			15		60	9	36	Average 240%

Here likewise the rising of the price of production at the same ratio fully compensates for the decrease in the productivity both in the yield and rent in money.

The third case shows itself in its pure form only when the second investment of capital declines in its productivity, while that of the first remains constant, as assumed every-

where in the first and second cases. Here differential rent No. I is not touched, the change affects only that part which arises from differential rent No. II. We give below two illustrations: In the first we assume that the productivity of the second investment of capital has been reduced by one-half, in the second by three-fourths.

TABLE IX.

Soils	Acres	Invested Capital P. St.	Profit P. St.	Cost of Product'n P. St.	Product Qrs.	Selling Price P. St.	Yield P. St.	Grain Rent Qrs.	Money Rent P. St.	Rate of Rent
A	1	2 1/2+2 1/2= 5	1	6	1+ 1/2= 1 1/2	4	6	0	0	0
B	1	2 1/2+2 1/2= 5	1	6	2+1 = 3	4	12	1 1/2	6	120%
C	1	2 1/2+2 1/2= 5	1	6	3+1/2= 4 1/2	4	18	3	12	240%
D	1	2 1/2+2 1/2= 5	1	6	4+2 = 6	4	24	4 1/2	18	360%
T'tl		20			15		60	9	36	Av'rage 240%

Table IX is the same as Table VIII, only that the decrease in productivity in VIII falls upon the first investment of capital, and in IX upon the second investment of capital.

TABLE X.

Soils	Acres	Invested Capital P. St,	Profit P. St.	Cost of Product'n P. St.	Product Qrs.	Selling Price P. St.	Yield P. St.	Grain Rent Qrs.	Money Rent P. st.	Rate of Rent
A	1	2 1/2+2 1/2= 5	1	6	1+ 1/4= 1 1/4	4 4 5	6	0	0	0
B	1	2 1/2+2 1/2= 5	1	6	2+ 1/2= 2 1/2	4 4 5	12	1 1/4	6	120%
C	1	2 1/2+2 1/2= 5	1	6	3+ 3/4= 3 3/4	4 4 5	18	2 1/2	12	240%
D	1	2 1/2+2 1/2= 5	1	6	4+1 = 5	4 4 5	24	3 3/4	18	360%
T'tl		20		24	12 1/2		60	7 1/2	36	Av'rage 240%

In this table, likewise, the total yield, the money rental, and the rate of rent remain the same as in Tables II, VII and VIII, because the product and the selling price have once more varied in an inverse proportion, while the invested capital has remained the same.

But how do matters stand in the other case, which is possible with a rising price of production, namely in the case that a soil, which so far was too poor to be cultivated, is taken under cultivation?

Let us suppose that such a soil, which we will designate by *a*, is entering into competition. Then the hitherto rentless soil A would yield a rent, and the foregoing Tables VII, VIII and X would assume the following forms:

TABLE VIIa.

Soils	Acres	Capital P. St.	Profit P. St.	Cost of Product'n P. St.	Product Qrs.	Selling Price P. St.	Yield P. St.	Grain Rent Qrs.	Money Rent P. St.	Increase
a	1	5	1	6	1½	4	6	0	0	0
A	1	2 1 2+2 1 2	1	6	½+1¼= 1¾	4	7	1 1/4	1	1
B	1	2 1 2+2 1 2	1	6	1 +2½= 3½	4	14	2	8	1+7
C	1	2 1 2+2 1 2	1	6	1½+3¾= 5¼	4	21	3 3 4	15	1+2×7
D	1	2 1 2+2 1 2	1	6	2 +5 = 7	4	28	5 1 2	22	1+3×7
T'ls				30	19		76	11 1/2	46	

TABLE VIIIa.

Soils	Acres	Capital P. St.	Profit	Cost of Product'n P. St.	Product Qrs.	Selling Price P. St.	Yield P. St.	Grain Rent Qrs.	Money Rent P. St.	Increase
a	1	5	1	6	1¼	4 4/5	6	0	0	0
A	1	2½+2½	1	6	1 + ½= 1½	4 4 5	7 1 5	1/4	1 1 5	1 1/5
B	1	2½+2½	1	6	1 +2 = 3	4 4 5	14 2 5	1 3 4	8 2 5	1 1 5+7 1 5
C	1	2½+2½	1	6	1½ +3 = 4½	4 4 5	21 3 5	2 1 4	15 3 5	1 1 5+2×7 1 5
D	1	2½+2½	1	6	2 +4 = 6	4 4 5	28 4 5	4 3 4	22 4 5	1 1 5+3×7 1 5
T'ls				30	16¼		78	9	48	

TABLE Xa.

Soils	Acres	Capital P. St.	Profit	Cost of Product'n P. St.	Product Qrs.	Selling Price P. St.	Yield P. St.	Grain Rent Qrs.	Money Rent P. St.	Increase
a	1	5	1	6	1⅛	5⅓	6	0	0	0
A	1	2 1 2+2 1/2	1	6	1+ ¼= 1¼	5⅓	6⅔	⅛	⅔	⅔
B	1	2 1/2+2 1 2	1	6	2+ ½= 2½	5⅓	13⅓	1⅜	7⅓	⅔+6⅔
C	1	2 1 2+2 1/2	1	6	3+ ¾= 3¾	5⅓	20	2⅝	14	⅔+2×6⅔
D	1	2 1/2+2 1/2	1	6	4+1 = 5	5⅓	26⅔	3⅞	20⅔	⅔+3×6⅔
T'ls				30	13⅝		72⅔	8	42⅔	

By the interpolation of soil *a* there arises a new differential rent No. I. Upon this new basis differential rent No. II likewise develops in an altered form. The soil *a* has a different fertility in every one of the above three Tables. The

series of successively increasing productivities begins only with soil A. The series of rising rents corresponds to this. The rent of the least rent producing soil forms a constant magnitude, which is simply added to all higher rents; only after the deduction of this constant magnitude does the series of differences clearly appear among the higher rents, and so does its parallelism with the succession of fertilities of the various kinds of soil. In all Tables, the fertilities from A to D have a proportion of 1 : 2 : 3 : 4, and the rents are correspondingly in VIIa as $1 : 1 + 7 : 1 + 2 \times 7 : 1 + 3 \times 7$, in VIIIa as $1\frac{1}{5} : 1\frac{1}{5} + 7\frac{1}{5} : 1\frac{1}{5} : 2 \times 7\frac{1}{5} : 1\frac{1}{5} + 3 \times 7\frac{1}{5}$, and in Xa as $\frac{2}{3} : \frac{2}{3} + 6\frac{2}{3} : \frac{2}{3} + 2 \times 6\frac{2}{3} : \frac{2}{3} + 3 \times 6\frac{2}{3}$. In brief, if the rent of A = n, and the rent of the soil of next higher fertility = n + m, then the series is as n : n + m : n + 2m : n + 3m, etc.— F. E.]

[Since the foregoing third case had not been elaborated in the manuscript, only its title being there, the editor had to supplement the work as he did above. It remains now to draw the general conclusions following from the entire foregoing analysis of differential rent in its three principal cases and nine subcases. The illustrations chosen in the manuscript do not suit this purpose very well. In the first place, they compare pieces of land, equal portions of which have yields at the ratio of 1 : 2 : 3 : 4. These are differences, which strongly exaggerate and which lead to utterly forced results in the further development of the assumptions and calculations made upon this basis. In the second place, these proportions create a wrong impression. If degrees of fertility of the proportion 1 : 2 : 3 : 4, etc., produce rents in a series of 0 : 1 : 2 : 3 : 4, etc., one feels tempted to derive the second series from the first and to explain the duplication, triplication, etc., of the rents out of the duplication, triplication, etc., of the total yields. But this would be wholly incorrect. The rents show proportions like that of 0 : 1 : 2 : 3 : 4 even when the degrees of fertility are proportioned as n : n + 1 : n +

2 : n + 3 : n + 4; the rents are not proportioned as the degrees of fertility, they are rather proportioned as the differences of fertility, beginning with the rentless soil as a zero point.

The tables of the original had to be given for the illustration of the text. But in order to obtain a suitable basis for the following results of our analysis, I present below a new series of tables, in which the yields are indicated in bushels ($\frac{1}{8}$ quarter or 36.35 liters) and shillings.

The first of these tables, Table XI, corresponds to the former Table I. It shows the yields and rents for five qualities of soil, A to E, with a first investment of a capital of 50 shillings, which makes a profit of 10 shillings, so that the total cost of production per acre is 60 shillings. The yields in grain are placed at low figures, 10, 12, 14, 16, 18 bushels per acre. The resulting regulating price of production is 6 shillings per bushel.

The following 13 tables correspond to the three cases of differential rent No. II, with an additional investment of a capital of 50 shillings per acre upon the same soil, with a constant, falling and rising price of production. Every one of these cases, again, is represented as it turns out, 1) with a constant, 2) with a falling, 3) with a rising productivity of the second investment of capital as compared to the first. This results furthermore in a few other cases, which are presented separately.

In case I, with a constant price of production, we have:

Variant No. 1: The productivity of the second investment of capital remains the same (Table XII.)

Variant No. 2: The productivity declines. This can take place only when soil A receives no second investment of capital, and it may take place in such a way that
a) the soil B likewise produces no rent (Table XIII), or,
b) the soil B does not lose all rent (Table XIV).

Variant No. 3: The productivity increases. (Table XV.) This case likewise excludes a second investment of capital upon soil A.

In case II, with a falling price of production, we have:

Variant No. 1: The productivity of the second investment of capital remains the same (Table XVI).

Variant No. 2: The productivity declines (Table XVII). These two variants are conditioned upon the throwing of soil A out of competition, and soil B producing no rent and regulating the price of production.

Variant No. 3: The productivity increases (Table XVIII). In this case the soil A remains the regulator.

In case III, with a rising price of production, two eventualities are possible; soil A may remain without rent and regulate the price, or, an inferior class of soil than A enters into competition and regulates the price, in which case A produces a rent.

First eventuality: Soil A remains the regulator.

Variant No. 1: The productivity of the second investment remains the same (Table XIX). This will happen under the conditions assumed by us only when the productivity of the first investment decreases.

Variant No. 2: The productivity of the second investment decreases (Table XX). This does not exclude the possibility that the first investment may retain the same productivity.

Variant No. 3: The productivity of the second investment (Table XIX) increases; this, again, presupposes a falling productivity of the first investment.

Second eventuality: An inferior quality of soil (designated as *a*) enters into competition; soil A yields a rent.

Variant No. 1: The productivity of the second investment remains the same (Table XXII).

Variant No. 2: The productivity declines (Table XXIII).

Variant No. 3: The productivity increases (Table XXIV).

These three variants appear under the general conditions of the problem and require no further remarks.

We herewith produce the Tables.

Table XI.

Soils	Cost of Production	Product Bushels	Selling Price	Yield Shillings	Rent Shillings	Increase of Rent
A	60	10	6	60	0	0
B	60	12	6	72	12	12
C	60	14	6	84	24	2×12
D	60	16	6	96	36	3×12
E	60	18	6	108	48	4×12
Total					120	10×12

When a second investment is placed upon the same soil, we have the following eventualities:

First Case: The Price of production remains unaltered.

Variant No. 1: The productivity of the second investment remains the same.

Table XII.

Soils	Cost of Production	Product Bushels	Selling Price	Yield Shillings	Rent Shillings	Increase of Rent
A	60+60= 120	10+10= 20	6	120	0	0
B	60+60= 120	12+12= 24	6	144	24	24
C	60+60= 120	14+14= 28	6	168	48	2×24
D	60+60= 120	16+16= 32	6	192	72	3×24
E	60+60= 120	18+18= 36	6	216	96	4×24
Total					240	10×24

Variant No. 2: The productivity of the second investment of capital declines; soil A receives no second investment.

a) If soil B ceases to yield a rent.

Table XIII.

Soils	Cost of Production	Product Bushels	Selling Price Shillings	Yield Shillings	Rent Shillings	Increase of Rent
A	60	10	6	60	0	0
B	60+60= 120	12+ 8 =20	6	120	0	0
C	60+60= 120	14+ 9⅓=23⅓	6	140	20	20
D	60+60= 120	16+10⅔=26⅔	6	160	40	2×20
E	60+60= 120	18+20 =38	6	180	60	3×20
Total					120	6×20

b) If soil B does not lose all the rent.

Table XIV.

Soils	Cost of Production	Product Bushels	Selling Price Shillings	Yield Shillings	Rent Shillings	Increase of Rent
A	60	10	6	60	0	0
B	60+60=120	12+ 9 =21	6	126	6	6
C	60+60=120	14+10½=24½	6	147	27	6+21
D	60+60=120	16+12 =28	6	168	48	6+2×21
E	60+60=120	18+13½=31½	6	189	69	6+3×21
Total					150	4×6+6×21

Variant No. 3: The productivity of the second investment of capital increases; no second investment upon soil A.

Table XV.

Soils	Cost of Production	Product Bushels	Selling Price Shillings	Yield Shillings	Rent	Increase of Rent
A	60	10	6	60	0	0
B	60+60=120	12+15 =27	6	162	42	42
C	60+60=120	14+17½=31½	6	189	69	42+27
D	60+60=120	16+20 =36	6	216	96	42+2×27
E	60+60=120	18+22½=40½	6	245	123	42+3×27
Total					330	4×42+6×27

Second Case: The price of production declines.

Variant No. 1: The productivity of the second investment of capital remains the same. Soil A is thrown out of competition, soil B loses its rent.

Table XVI.

Soils	Cost of Production Shillings	Product Bushels	Selling Price	Yield Shillings	Rent Shillings	Increase of Rent
B	60+60=120	12+12=24	5	120	0	0
C	60+60=120	14+14=28	5	140	20	20
D	60+60=120	16+16=32	5	160	40	2×20
E	60+60=120	18+18=36	5	180	60	3×20
Total					120	6×20

Variant No. 2: The productivity of the second investment of capital declines; soil A is thrown out of competition, soil B loses its rent.

Table XVII.

Soils	Cost of Production Shillings	Product Bushels	Selling Price	Yield Shillings	Rent Shillings	Increase of Rent
B	60+60=120	12+ 9 =21	5 5/7	120	0	0
C	60+60=120	14+10½=24½	5 5/7	140	20	20
D	60+60=120	16+12 =28	5 5/7	160	40	2×20
E	60+60=120	18+13½=31½	5 5/7	180	60	3×20
Total					120	6×20

Variant No. 3: The productivity of the second investment of capital increases; soil A remains in the competition. Soil B produces rent.

Table XVIII.

Soils	Cost of Production Shillings	Product Bushels	Selling Price Shillings	Yield Shillings	Rent Shillings	Increase of Rent
A	60+60=120	10+15=25	4 4/5	120	0	0
B	60+60=120	12+18=30	4 4/5	144	24	24
C	60+60=120	14+21=35	4 4/5	168	48	2×24
D	60+60=120	16+24=40	4 4/5	192	72	3×24
E	60+60=120	18+27=45	4 4/5	216	96	4×24
Total					240	10×24

Third Case: The price of production rises.

A) If soil A remains without rent and continues to regulate the price.

Variant No. 1: The productivity of the second investment of capital remains the same; this implies a decreasing productivity of the first investment of capital.

Table XIX.

Soils	Cost of Production Shillings	Product Bushels	Selling Price	Yield Shillings	Rent Shillings	Increase of Rent
A	60+60=120	5+12½=17½	6 6/7	120	0	0
B	60+60=120	6+15 =21	6 6/7	144	24	24
C	60+60=120	7+17½=24½	6 6/7	168	48	2×24
D	60+60=120	8+20 =28	6 6/7	192	72	3×24
E	60+60=120	9+22½=31½	6 6/7	216	96	4×24
Total					240	10×24

Variant No. 2: The productivity of the second investment of capital decreases; this does not exclude a constant productivity of the first investment.

Table XX.

Soils	Cost of Production Shillings	Product Bushels	Selling Price Shillings	Yield Shillings	Rent Shillings	Increase of Rent
A	60+60=120	10+5=15	8	120	0	0
B	60+60=120	12+6=18	8	144	24	24
C	60+60=120	14+7=21	8	168	48	2×24
D	60+60=120	16+8=24	8	192	72	3×24
E	60+60=120	18+9=27	8	216	96	4×24
Total					240	10×24

Variant No. 3: The productivity of the second investment of capital rises, which implies, under the assumed conditions, a declining productivity of the first investment.

Table XXI.

Soils	Cost of Production Shillings	Product Bushels	Selling Price	Yield Shillings	Rent Shillings	Increase of Rent
A	60+60=120	5+12½=17½	6 6 7	120	0	0
B	60+60=120	6+15 =21	6 6 7	144	24	24
C	60+60=120	7+17½=24½	6 6 7	168	48	2×24
D	60+60=120	8+20 =28	6 6 7	192	72	3×24
E	60+60=120	9+22½=31½	6 6 7	216	96	4×24
Total					240	10×24

B) If an inferior soil (designated as *a*) becomes the regulator of prices and soil A produces a rent. This admits of a constant productivity of the second investment in the case of all variants.

Variant No. 1: The productivity of the second investment of capital remains the same.

Table XXII.

Soils	Cost of Production Shillings	Product Bushels	Selling Price	Yield Shillings	Rent Shillings	Increase of Rent
a	120	16	7½	120	0	0
A	60+60=120	10+10=20	7½	150	30	30
B	60+60=120	12+12=24	7½	180	60	2×30
C	60+60=120	14+14=28	7½	210	90	3×30
D	60+60=120	16+16=32	7½	240	120	4×30
E	60+60=120	18+18=36	7½	270	150	5×30
Total					450	15×30

Variant No. 2: The productivity of the second investment of capital declines.

Table XXIII.

Soils	Cost of Production Shillings	Product Bushels	Selling Price	Yield Shillings	Rent Shillings	Increase of Rent
a	120	15	8	120	0	0
A	60+60=120	10+ 7½=17½	8	140	20	20
B	60+60=120	12+ 9 =21	8	168	48	20×28
C	60+60=120	14+10½=24½	8	196	76	20+2×28
D	60+60=120	16+12 =28	8	224	104	20+3×28
E	60+60=120	18+13½=31½	8	252	132	20+4×28
Total					380	5×20+10×28

Variant No. 3: The productivity of the second investment increases.

Table XXIV.

Soils	Cost of Production Shillings	Product Bushels	Selling Price	Yield Shillings	Rent Shillings	Increase of Rent
a	120	16	7½	120	0	0
A	60+60=120	10+12½=22½	7½	168¾	48¾	15+33¾
B	60+60=120	12+15 =27	7½	202½	82½	15+2×33¾
C	60+60=120	14+17½=31½	7½	236¼	116¼	15+3×33¾
D	60+60=120	16+20 =36	7½	270	150	15+4×33¾
E	60+60=120	18+22½=40½	7½	303¾	183¾	15+5×33¾
Total					581¼	5×15+15×33¾

These Tables lead to the following conclusions:

In the first place they show that the series of rents maintains the same proportions as the series of degrees of fertility, taking the rentless regulating soil as the zero point. Not the absolute yields, but only the differences in yield are the determining elements of rent. Whether the different kinds of soil produce 1, 2, 3, 4, 5 bushels, or whether they produce 11, 12, 13, 14, 15 bushels of yield per acre, the rents are in both cases seriatim 0, 1, 2, 3, 4, bushels, or money to that amount.

But the result of our analysis is far more important with respect to the total yields of rent with a repeated investment of capital upon the same soil.

In five cases out of the analysed thirteen the total amount of the rents is doubled with the duplication of the investment of capital; instead of 10 times 12 shillings it becomes 10 times 24 shillings, or 240 shillings. These cases are:

Case I, constant price, Variant No. 1, the increase of productivity remaining the same (Table XII).

Case II, falling price, Variant No. III: increasing expansion of production (Table XVIII).

Case III, increasing price, first eventuality, where soil A remains the regulator, in all three Variants (Tables XIX, XX, and XXI).

In four cases the rent increases by more than double, namely:

Case I, Variant No. III, constant price, increasing expansion of production (Table XV). The amount of the rent rises to 330 shillings.

Case III, second eventuality, where soil A produces a rent, in all three variants (Table XXII, rent 15 times 30 = 450 shillings; Table XXIII, rent 5 times 20 plus 10 times 28 = 380 shillings; Table XXIV, rent 5 times 15 plus 15 times $33\frac{1}{3} = 581\frac{1}{4}$ shillings).

In one case the rent rises, but not to double the amount of the rent produced by the first investment of capital:

Case I, constant price, Variant II: falling productivity of the second investment, under conditions, in which B does not wholly lose its rent (Table XIV, rent 4 times 6 plus 6 times 21 = 150 shillings).

Finally, it is only in three cases that the total rent, with a second investment upon all kinds of soil, remains at the same level as with the first investment (Table XI); these are the cases, in which the soil A is thrown out of competition and soil B becomes the regulator and pays no rent. In this case the rent of B is not only lost, but is also deducted from every succeeding link of the rent series. This is the basis of the above result. We mean the following cases:

Case I, Variant II, when the conditions are such that soil A is eliminated (Table XIII). The sum of the rent is six times twenty, or $10 \times 12 = 120$, as in Table XI.

Case II, Variants I and II. Here soil A is necessarily eliminated, according to the assumption (Tables XVI and XVII) and the sum of the rent is again $6 \times 20 = 10 \times 12 = 120$ shillings.

This is to say: In the great majority of all possible cases the rent rises, both per acre of the rent paying soils and for the total amount, as a result of an increased investment of capital upon the land. Only in three cases out of the thirteen analysed cases the total amount of the rent remains unaltered. These are the cases, in which the lowest quality of soil, which hitherto paid no rent, drops out of competition and the next higher one takes its place and loses its rent. But even in these cases do the rents upon the superior soils rise in comparison to the rents due to the first investment. When the rent of C falls from 24 to 20, then that of D and E rises from 36 and 48 respectively to 40 and 60 shillings.

A fall of the total rents below the level of the first investment of capital (Table XI) would be possible only in the case that soil B as well as soil A would drop out of competition and soil C become regulating and rentless.

The more capital is applied to a certain soil, and the higher the development of agriculture and of civilization in general is in a certain country, the more do the rents rise per acre and per total amount of rental, and the more immense becomes the tribute paid by society to the great land owners in the form of surplus profits — so long as the different soils taken under cultivation remain capable of competition.

This law explains the wonderful vitality of the class of great landlords. No social class lives so sumptuously, no other claims like it a right to a traditional luxury in keeping with its "estate," regardless of where the money for that purpose may come from, no other class piles debt upon debt as lightheartedly as it. And yet it always lands on its feet — thanks to the capital invested by other people in the soil, whereby the landlord collects a rent, which stand in no proportion to the profits to be drawn out of the soil by the capitalist.

However, the same law also explains, why the vitality of the great landlord is gradually exhausted.

When the English corn taxes were abolished in 1846, the English manufacturers believed that they had transformed the landowning aristocracy into paupers. Instead of that they

became richer than ever. How did that happen? Very simple. In the first place, the renting capitalists were now compelled by contract to invest 12 pounds sterling annually instead of 8 pounds, as heretofore. And in the second place, the landlords, being strongly represented also in the Lower House, granted to themselves a heavy subsidy for the drainage and other permanent improvements of their lands. Since no total displacement of the worst soil took place, but at the worst a temporary employment of such soil for other purposes, the rents rose in proportion to the increased investment of capital, and the landed aristocracy were better off than ever before.

But everything is perishable. The transoceanic steamboats and the railroads of North and South America and India enabled very peculiar masses of land to enter into competition upon the European grain markets. There were on the one hand the North American prairies, the Argentine pampas, steppes, made fertile for the plow by nature itself, virgin soil, which offered rich harvest for years to come even with a primitive cultivation and without any fertilization. Then there were the lands of the Russian and Indian communes, that had to sell a portion of their product, and an increasing one at that, for the purpose of obtaining money for the taxes wrung from them by the pitiless despotism of the state, very often by means of torture. These products were sold without regard to their cost of production, sold at the price offered by the dealer, because the peasant had to have money under all circumstances when tax paying day came around. And against the competition of the virgin prairie soils and of the Russian and Indian peasants ground down by taxation, the European capitalist farmer and peasant could not stand up at the old rents. A portion of the soil of Europe fell definitely out of the competition for the raising of grain, the rents fell everywhere. Our second case Variant II (falling prices and falling productivity of the additional investment of capital) became the rule for Europe. This accounts for the woes of the landlords from Scotland to Italy, and from Southern France to Eastern Prussia. Fortunately all prairie lands

have not been taken under cultivation. There are enough of them left to ruin all the great landlords of Europe and the small ones into the bargain.— F. E.]

The heads, under which rent is to be analyzed, are the following:

A. Differential rent.
   1) Meaning of differential rent. Illustration by water power. Transition to real agricultural rent.
   2) Differential rent No. I, arising from different fertilities of different pieces of land.
   3) Differential rent No. II, arising from successive investments of capital upon the same soil. Differential rent No. II is to be analysed
      a) with a stationary price of production.
      b) with a falling price of production.
      c) with a rising price of production.

And furthermore
      d) the transformation of surplus profit into rent.
   4) Influence of this rent upon the rate of profit.

B. Absolute rent.

C. The price of land.

D. Final Remarks concerning ground rent.

As the general result of our analysis of differential rent we come to the following conclusions:

1) The formation of surplus profits may take place in different ways. On the one hand it may come about by the help of differential rent No. I, that is, by an investment of the entire agricultural capital upon one soil area consisting of soils of different fertilities. Or, it may come about by means of differential rent No. II, that is by means of the varying differential productivity of successive investments of capital upon the same soil, which signifies here a greater productivity, say in wheat measured by quarters, than is secured with the same investment of capital upon the worst

rentless soil, which regulates the price of production. But no matter how these surplus profits may arise, their transformation into rents, their transfer from the capitalist farmer to the landlord, always presupposes that the various individual prices of production represented by the partial products of the individual capitals invested in succession (independently of the general price of production by which the market is regulated) have previously been reduced to an individual average price of production. The excess of the general regulating price of production of the product of one acre over its individual average price, forms and measures the rent per acre. In differential rent No. I the differential results may be distinguished by themselves, because they take place upon differentiated portions of land lying side by side, with an investment of capital and a degree of cultivation considered normal per acre. In differential rent No. II they must first be made distinguishable; they must in fact be reconverted into differential rent No. I, and this cannot take place in any other but the indicated way. Take for instance Table III, Chapter XLI, 3.

Soil B gives for the first investment of capital 2½ pounds sterling 2 quarters per acre, and for the second equally large one 1½ quarters; together 3½ quarters upon the same acre. These 3½ quarters do not show what part of them is a product of the investment of capital No. I and what part a product of capital No. II, for they are all grown upon the same soil. They are in fact the product of the total capital of 5 pounds sterling; and the actual condition of the matter is that a capital of 2½ pounds sterling produced 2 quarters, and a capital of 5 pounds sterling produced only 3½ quarters, not 4 quarters. The case would be just the same, if these 5 pounds sterling were producing 4 quarters, so that the proceeds of both investments of capital would be the same, or even 5 quarters, so that the second investment of capital would yield a surplus of 1 quarter. The price of production of the first 2 quarters is 1½ pounds sterling per quarter, and that of the second 1½ quarters is 2 pounds sterling per quarter. Consequently the 3½ quarters together cost 6 pounds sterling.

This is the individual price of production of the total product, and it makes an average of 1 pound and $1\frac{2}{7}$ shillings per quarter, in round figures $1\frac{3}{4}$ pounds sterling. With the average price of production regulated by soil A, namely 3 pounds sterling, this makes a surplus profit of $1\frac{1}{4}$ pounds sterling per quarter, and for the total $3\frac{1}{2}$ quarters a surplus profit of $4\frac{3}{8}$ pounds sterling. With the average price of production of B this is represented by about $1\frac{1}{2}$ quarters. In other words, the surplus profit of B is represented by an aliquot portion of the product of B, by these $1\frac{1}{2}$ quarters, which express the rent in terms of grain, and which under the prevailing price of production sell at $4\frac{1}{2}$ pounds sterling. But on the other hand, the surplus product of one acre of B compared to that of A is not without ceremony a formation of surplus profit, is not offhand a surplus product. According to our assumption one acre of B produces $3\frac{1}{2}$ quarters, whereas one acre of A produces only 1 quarter. The surplus of the product of B is, therefore, $2\frac{1}{2}$ quarters, but the surplus product is only $1\frac{1}{2}$ quarters; for the capital invested in B is twice that of A, and for this reason its cost of production is doubled. If soil A should also receive an investment of 5 pounds sterling, and the rate of productivity should remain the same, then the product would amount to 2 quarters instead of 1 quarter, and it would then be seen that the actual surplus product is found, not by a comparison of $3\frac{1}{2}$ with 1, but of $3\frac{1}{2}$ with 2, so that it would be only $1\frac{1}{2}$ quarter, not $2\frac{1}{2}$ quarters. Furthermore, if B should invest a third capital of $2\frac{1}{2}$ pounds sterling, which would produce only 1 quarter, so that this quarter would cost 3 pounds sterling, the same as that of A, then its selling price would cover only the cost of production, would yield only the average profit, but not a surplus profit, and would not offer anything that could be converted into rent. The product per acre of any kind of soil, compared with the product per acre of soil A, shows neither whether it is a product of the same or of a larger investment of capital, nor whether the additional product covers merely the price of production, nor whether it is due to a greater productivity of the additional capital.

2) With a decreasing rate of productivity of the additional investments of capital, whose limits, so far as the new formation of surplus profit is concerned, is that investment of capital which just covers the cost of production, in other words, which produces one quarter at the same expense as the same investment of capital in one acre of soil A, amounting to 3 pounds sterling according to our assumption, we come to the following conclusions on the basis of what has gone before: That the limit, where the total investment of capital in one acre of B would not yield any more rent, is reached when the individual average price of production of the product per acre of B would rise to the price of production per acre of A.

If B invests only such additional capital as pays just the price of production, but forms no surplus profit, no rent, then this raises only the individual average price of production per quarter, but does not affect the surplus profit, or eventually the rent, formed by previous investments of capital. For the average price of production always remains under that of A, and when the excess over the price per quarter decreases, then the number of quarters increases in the same ratio, so that the total excess over the price remains unaltered.

In the case assumed, the first two investments of capital of 5 pounds sterling produce $3\frac{1}{2}$ quarters upon B, which amounts to $1\frac{1}{2}$ quarters of rent, at $4\frac{1}{2}$ pounds sterling, according to our assumption. Now, if a third investment of capital of $2\frac{1}{2}$ pounds sterling is added, which produces only one additional quarter, then the total price of production (including a profit of 20%) of the $4\frac{1}{2}$ quarters is 9 pounds sterling, so that the average price per quarter is 2 pounds sterling. The average price of production per quarter upon B has then risen from $1\frac{5}{7}$ pounds sterling to 2 pounds sterling, so that the surplus profit per quarter, compared with the regulating price of A, has fallen from $1\frac{2}{7}$ pounds sterling to 1 pound sterling. But $1 \times 4\frac{1}{2} = 4\frac{1}{2}$ pounds sterling, just as formerly $1\frac{2}{7} \times 3\frac{1}{2} = 4\frac{1}{2}$ pounds sterling.

If two more investments of $2\frac{1}{2}$ lbs. sterling each were added

upon B, and that these investments produce one quarter only at its average price of production, then the total product per acre would be $6\frac{1}{2}$ quarters, and their cost of production 15 pounds sterling. The average price of production per quarter of B would have risen once more, from 1 pound sterling to $2\frac{4}{13}$ pound sterling, and the surplus profit per quarter, compared with the regulating price of production of A, would have dropped once more, from 1 pound sterling to $\frac{9}{13}$ pound sterling. But these $\frac{9}{13}$ would now have to be calculated upon $6\frac{1}{2}$ quarters instead of $4\frac{1}{2}$ quarters. And $\frac{9}{13} \times 6\frac{1}{2} = 1 \times 4\frac{1}{2} = 4\frac{1}{2}$ pounds sterling.

The inference from this is, in the first place, that no raising of the regulating price of production is necessary under these circumstances, in order to make possible additional investments of capital even to the point where the additional capital ceases wholly to produce any surplus profit and yields only the average profit. It follows furthermore that the sum of the surplus profit per acre remains the same here, no matter how much the surplus profit per quarter may decrease; this decrease is always balanced by a corresponding increase of the quarters produced per acre. In order that the average price of production may rise to the general price of production (in this case to 3 pounds sterling for soil B) it is necessary that additions should be made to the capital, which must have a product of a higher price of production than the regulating one of 3 pounds sterling. But we shall see that this does not suffice without further ado in order to raise the average price of production per quarter of B to the general price of production of 3 pounds sterling.

Let us assume that soil B produced.

1) $3\frac{1}{2}$ quarters as before at a price of production of 6 pounds sterling; this with two investments of capital of $2\frac{1}{2}$ pounds sterling each, which both form surplus profits, but of a decreasing amount.

2) 1 quarter at 3 pounds sterling; an investment of capital, in which the individual price of production shall be equal to the regulating price of production.

3) 1 quarter at 4 pounds sterling; an investment of capi-

tal, in which the individual price of production shall be higher by 25% than the regulating price.

We should then have $5\frac{1}{2}$ quarters per acre, at 13 pounds sterling, with an investment of a capital of 10 pounds sterling; this would be four times the original investment of capital, but not quite three times the product of the first investment of capital.

$5\frac{1}{2}$ quarters per acre at 13 pounds sterling make an average price of production of $2\frac{4}{11}$ pounds sterling, which would give a surplus of $\frac{7}{11}$ pound per quarter at the regulating price of production of 3 pounds sterling. This surplus may be converted into rent. $5\frac{1}{2}$ quarters sold at the regulating price of production of 3 pounds sterling make $16\frac{1}{2}$ pounds sterling. After deducting the cost of production of 13 pounds sterling a surplus, or rent of $3\frac{1}{2}$ pounds sterling remains, which, calculated at the present average price of production per quarter of B, that is, at $2\frac{4}{11}$ pounds per quarter, represent $1\frac{5}{7}$ quarters. The money rent would have fallen by 1 pound sterling, the grain rent by about $\frac{1}{2}$ quarter, but in spite of the fact that the fourth additional investment upon B does not produce a surplus profit, but even less than the average profit, a surplus profit and a rent still continue to exist. Let us assume that not only the investment of capital as illustrated in No. 3), but also that in No. 2), produce at a cost exceeding the regulating price of production, then the total production is $3\frac{1}{2}$ quarters at 6 pounds sterling plus 2 quarters at 8 pounds sterling, total $5\frac{1}{2}$ quarters at 14 pounds sterling cost of production. The average price of production per quarter would be $2\frac{6}{11}$ pounds sterling, and it would leave a surplus of $\frac{5}{11}$ pound sterling. The $5\frac{1}{2}$ quarters, sold at 3 pounds sterling, make $16\frac{1}{2}$ pounds sterling; subtract the 14 pounds sterling of cost of production, and $2\frac{1}{2}$ pounds sterling remain for rent. At the present average price of production upon B this would be equivalent to $\frac{5}{6}\frac{5}{6}$ quarters. In other words, a rent would still remain, although less than before.

This shows at any rate, that upon the better soils with additional investments of capital, whose product costs more than the regulating price of production, the rent does not disap-

pear, at least not within the bounds of admissible practice, although it must decrease, and will do so in proportion, on the one hand, to the aliquot part formed by this unproductive capital in the total investment of capital, on the other hand in proportion to the decrease of its fertility. The average price of its fertility would still stand below the regulating price and would still leave a surplus profit that could be converted into rent.

Let us now assume that the average price per quarter of B coincides with the general price of production, in consequence of four successive investments of capital ($2\frac{1}{2}$, $2\frac{1}{2}$, 5 and 5 pounds sterling) with a decreasing productivity.

Capital P. St.	Profit P. St.	Yield Qrs.	Cost of Production		Selling Price P. St.	Proceeds P. St.	Surplus for Rent	
			per Qr. P. St.	Together P. St.			Qrs.	P St.
(1) $2\frac{1}{2}$	$\frac{1}{2}$	2	$1\frac{1}{2}$	3	3	6	1	3
(2) $2\frac{1}{2}$	$\frac{1}{2}$	$1\frac{1}{2}$	2	3	3	$4\frac{1}{2}$	$\frac{1}{2}$	$1\frac{1}{2}$
(3) 5	1	$1\frac{1}{2}$	4	6	3	$4\frac{1}{2}$	$-\frac{1}{2}$	$-1\frac{1}{2}$
(4) 5	1	1	6	6	3	3	-1	-3
15	3	6		18		18	0	0

The capitalist renter in this case sells every quarter at its individual price of production, and consequently the total number of quarters at their average price of production per quarter, which coincides with the regulating price of 3 pounds sterling. Hence he still makes a profit of 20%, or 3 pounds sterling, upon his capital of 15 pounds sterling. But the rent is gone. What has become of the surplus in this compensation of individual prices of production per quarter with the general price of production?

The surplus profit on the first $2\frac{1}{2}$ pounds sterling was 3 pounds sterling; on the second $2\frac{1}{2}$ pounds sterling it was $1\frac{1}{2}$ pound sterling; total surplus profit on one-third of the invested capital, that is, on 5 pounds sterling, $4\frac{1}{2}$ pounds sterling, or 90%.

In the case of investment No. 3) the 5 pounds sterling do not only yield no surplus profit, but its product of $1\frac{1}{2}$ quarters, if sold at the general price of production, gives a minus of $1\frac{1}{2}$ pounds sterling. Finally, in the case of in-

vestment No. 4), which amounts likewise to 5 pounds sterling, its product of 1 quarter, if sold at the general price of production, gives a minus of 3 pounds sterling. Both investments of capital together give a minus of $4\frac{1}{2}$ pounds sterling, equal to the surplus profit of $4\frac{1}{2}$ pounds sterling, which was realized on investments Nos. 1) and 2).

The surplus profits and deficits balance one another. Therefore the rent disappears. In fact this is possible only because the elements of surplus-value, which form a surplus profit, or rent, now pass into the formation of the average profit. The capitalist renter makes this average profit of 3 pounds sterling on 15 pounds sterling, or of 20%, at the expense of the rent.

The compensation of the individual average price of production of B to the general price of production of A, which regulates the market, presupposes that the difference, by which the individual price of the product of the first investment of capital stands below the regulating price, is more and more compensated and finally balanced by the difference, by which the product of the subsequent investments of capital stands above the regulating price. What appears as a surplus profit, so long as the product of the first investment of capitals sold by itself, becomes by degrees a part of their average price of production, and thereby enters into the formation of the average profit, until it is finally absorbed in this way.

If only 5 pounds sterling are invested in B, instead of 15 pounds sterling, and if the additional $2\frac{1}{2}$ quarters of the last Table are produced by taking $2\frac{1}{2}$ new acres of A under cultivation with an investment of $2\frac{1}{2}$ pounds sterling per acre, then the invested additional capital would amount only to $6\frac{1}{4}$ pounds sterling, so that the total investment on A and B for the production of these 6 quarters would be only $11\frac{1}{4}$ pounds sterling instead of 15 pounds sterling, and the total cost of production of these including the profit of $13\frac{1}{2}$ pounds sterling. The 6 quarters would still be sold at 18 pounds sterling, but the investment of capital would have decreased by $3\frac{3}{4}$ pounds sterling, and the rent upon B would be $4\frac{1}{2}$ pounds sterling per acre, as before. It would be different, if

the production of the additional $2\frac{1}{2}$ quarters would require that inferior soil than A, for instance A — 1, A — 2, should be taken under cultivation; so that the price of production per quarter, for $1\frac{1}{2}$ quarters on soil A — 1 would be 4 pounds sterling, and for the last quarter on soil A — 2 would be 6 pounds sterling. In this case these 6 pounds sterling would be the regulating price of production per quarter. The $3\frac{1}{2}$ quarters of B would then be sold at 21 pounds sterling instead of $10\frac{1}{2}$ pounds sterling, and this would leave a rent of 15 pounds sterling instead of $4\frac{1}{2}$ pounds sterling, or in grain a rent of $2\frac{1}{2}$ quarters instead of $1\frac{1}{2}$ quarter. In the same way the one quarter on A would now leave a rent of 3 pounds sterling, or of $\frac{1}{2}$ quarter.

Before we discuss this point any further, we will pause to make the following observation.

The average price of one quarter of B is compensated and coincides with the general price of production of 3 pounds sterling per quarter, regulated by A, as soon as that portion of the total capital, which produces the excess of $1\frac{1}{2}$ quarter, is balanced by that portion of the total capital, which produces a deficit of $1\frac{1}{2}$ quarter. How soon this compensation is effected, or how much capital with less than average productivity must be invested in B for that purpose, will depend, assuming the surplus productivity of the first investments of capital to be given, upon the relative underproductivity of the later invested capitals, compared with an investment of the same amount upon the worst regulating soil A, or upon the individual price of production of their product, compared with the regulating price.

We now come to the following conclusions from the foregoing:

1) So long as the additional capitals are invested in the same soil with a surplus productivity, even a decreasing one, the absolute rent in grain and money increases per acre, although it decreases relatively, in proportion to the advanced capital (in other words, the rate of surplus profit, or rent).

The limit is here formed by that additional capital, which yields only the average profit, or the price of production of whose product coincides with the general price of production. The price of production remains the same under these circumstances, unless the production upon the lesser soils becomes superfluous through an increased supply. Even with a falling price may these additional capitals still produce a surplus profit, though a smaller one, within certain limits.

2) The investment of additional capital, which produces only the average profit, whose surplus productivity is therefore zero, does not alter anything in the level of the existing surplus profit, and consequently of the rent. The individual average price per quarter increases thereby upon the superior soils; the surplus per quarter decreases, but the number of quarters, which carry this decreased surplus, increases, so that the product remains the same.

3) Additional investments of capital, whose product has an individual price of production exceeding the regulating price, whose surplus productivity is therefore not merely zero, but less than zero, that is, a minus lower than the productivity of the same investment of capital upon the regulating soil A, bring the individual average price of production of the total product of the superior soil closer to the general price of production, reduce more and more the difference between both, which forms the surplus profit, or rent. More and more of that which forms a surplus profit, or rent, passes over into the formation of the average profit. But nevertheless the total capital invested in one acre of B continues to yield a surplus profit, although a decreasing one in proportion as the capital with undernormal productivity and the degree of its underproductivity increase. The rent, with an increasing capital and increasing production, decreases in this case absolutely per acre, not merely relatively as compared to the increasing size of the invested capital, as in the second case.

The rent cannot disappear, unless the individual average price of production of the total product of the better soil B coincides with the regulating price, so that the entire sur-

plus profit of the first more productive investment of capital is consumed in the formation of the average profit.

The minimum limit of the fall for the rent per acre is the point at which it disappears. But this point does not assert itself, as soon as the additional investments of capital work with an underproductivity, but rather as soon as the additional investment of the underproductive capitals becomes so great that their effect paralyzes the overproductivity of the first investments of capital, so that the productivity of the total capital becomes the same as that of A, and the individual average price of the quarter of B the same as that of the quarter of A.

In this case, likewise, the regulating price of production, 3 pounds sterling per quarter, remains the same, although the rent would have disappeared. Only after this point would have been passed, would the price of production have to rise in consequence of an increase of either the degree of underproductivity of the additional capital or of the magnitude of the additional capital of the same underproductivity. For instance, if in the above Table $2\frac{1}{2}$ quarters were produced instead of $1\frac{1}{2}$ quarters, at 4 pounds sterling per quarter, upon the same soil, then we should have altogether 7 quarters at 22 pounds sterling cost of production; the quarter would cost $3\frac{1}{7}$ pounds sterling; it would be $\frac{1}{7}$ above the general price of production which would have to rise.

For a long time, then, additional capital with underproductivity, or even increasing underproductivity, might be invested, until the individual average price per quarter of the best soils would become equal to the general price of production, until the excess of the latter over the former, and with it the surplus profit and the rent, would entirely disappear.

And even in this case the disappearance of the rent from the better kinds of soil would only signify that the individual average price of their products would coincide with the general price of production, so that this last price would not have to rise.

In the above illustration, upon soil B, which is there the lowest of the better rent paying soils, $3\frac{1}{2}$ quarters were pro-

duced by a capital of 5 pounds sterling with a surplus productivity, and $2\frac{1}{2}$ quarters by a capital of 10 pounds sterling with underproductivity, together 6 quarters, of which $\frac{5}{12}$ are produced by the capitals with underproductivity. And only at this point does the individual average price of production of the 6 quarters rise to 3 pounds sterling and coincide with the general price of production.

Under the law of landed property, however, the last $2\frac{1}{2}$ quarters could not have been produced in this way at 3 pounds sterling per quarter, with the exception of the case, in which they may be produced upon $2\frac{1}{2}$ new acres of the soil A. The case, in which the additional capital produces only at the general price of production, would have been the limit. Beyond it the additional investment of capital would have to cease upon the same soil.

If the capitalist renter once pays $4\frac{1}{2}$ pounds sterling of rent for the first two investments of capital, he must continue to pay them, and every investment of capital, which produces one quarter below 3 pounds sterling, would cause him a deduction from his profit. The compensation of the individual price of production, in the case of underproductivity, is thereby prevented.

Let us take this case in the previous illustration, in which the price of production of the soil A, at 3 pounds sterling per quarter, regulates the price for B.

Capital P. St.	Profit P. St.	Cost of Production P. St.	Yield Qrs.	Cost of Production per Qr.	Selling Price		Surplus Profit P. St	Loss P. St.
					per Qr. P. St.	Together P. St.		
2½	1½	3	2	1½	3	6	3	—
2½	½	3	1½	2	3	4½	1½	-
5	1	6	1½	3	3	4½	—	1½
5	1	6	1	6	3	3	—	3
15	4	18				18	4½	4½

The cost of production of the $3\frac{1}{2}$ quarters in the first two investments is likewise 3 pounds sterling per quarter for the capitalist renter, since he has to pay a rent of $4\frac{1}{2}$ pounds sterling, the difference between his individual price of production and the general price of production not flowing into his

pocket. In his case, then, the excess of the price of the first two investments of capital cannot serve for the compensation of the deficit incurred in the production of the third and fourth investment of capital.

The $1\frac{1}{2}$ quarters in investment No. 3) cost the capitalist renter, with profit included, 6 pounds sterling; but at the regulating price of 3 pounds sterling per quarter he can sell them only for $4\frac{1}{2}$ pounds sterling. In other words, he would not only lose his whole profit, but also $\frac{1}{2}$ pound sterling, or 10% of his invested capital of 5 pounds sterling. The loss of profit and capital in the case of investment No. 3) would amount to $1\frac{1}{2}$ pound sterling, and in the case of investment No. 4) 3 pounds sterling, together $4\frac{1}{2}$ pounds sterling, just as much as the rent of the better investments amounts to, whose individual price of production cannot take part in the compensation of the individual average price of production of the total product of B, because its surplus is paid as a rent to some third person.

If the demand should require that the additional $1\frac{1}{2}$ quarters must be produced by a third investment of capital, then the regulating market price would have to rise to 4 pounds sterling per quarter. In consequence of this rise in the regulating market price the rent upon B would rise for the first and second investment, and a rent would be formed upon A.

Although the differential rent is but a formal transformation of surplus profit into rent, since property in land enables the owner in this case to draw the surplus profit of the capitalist renter into his own hands, we find nevertheless that the successive investment of capital upon the same land, or, what amounts to the same, the increase of the capital invested in the same land, reaches its limit far more rapidly when the rate of productivity of the capital decreases and the regulating price remains the same, so that in fact a more or less artificial barrier is erected as a consequence of the mere formal transformation of surplus profit into ground rent,— which is the result of private property in land. The rise of the general price of production, which becomes necessary when the limit is narrowed beyond the ordinary, is in this case not

merely the cause of a rise of the differential rent, but the existence of differential rent as rent is at the same time a reason for the earlier and more rapid rise of the general price of production, in order to insure by this means the supply of the needed larger product.

Furthermore we must make a note of the following facts:

By an addition of capital to soil B the regulating price could not, as above, rise to 4 pounds sterling, if soil A should supply the additional product below 4 pounds sterling by a second investment of capital, or if new and worse soil than A should come into competition, whose price of production would be higher than 3 but lower than 4 pounds sterling. We see, then, that differential rent No. I and differential rent No. II, while the first is the basis of the second, are at the same time mutual limits for one another, by which now a successive investment of capital upon the same soil, now an investment of capital side by side upon new soil, is brought about. In like manner they act as mutual boundaries in other cases, for instance, when better land is taken up.

CHAPTER XLIV.

DIFFERENTIAL RENT EVEN UPON THE WORST SOIL UNDER CULTIVATION.

Let us assume that the demand for grain is rising, and that the supply cannot be made to cover the demand, unless successive investments of capital with deficient productivity are made upon the rent-paying soils, or by an additional investment of capital, likewise with a decreasing productivity, upon soil A, or by the investment of capital in new lands of a lesser quality than A.

Let us take soil B as a representative of the rent paying soils.

The additional investment of capital demands a rising of the market price above the prevailing price of production of

3 pounds sterling per quarter, in order that the increased production of one quarter (which may here stand for one million quarters, as may every acre for one million acres) upon B may be possible. An increased production may also take place upon soils C and D, etc., the soils paying the highest rent, but only with a decreasing power to produce a surplus; but it is assumed that the one quarter upon B must necessarily be produced in order to cover the demand. If this one quarter is more easily produced by investing more capital in B than with the same addition of capital to A, or by descending to soil A — 1, which may, perhaps, produce one quarter only for 4 pounds sterling, whereas the additional capital upon A might do so at $3\frac{3}{4}$ pounds sterling per quarter, then the additional capital upon B will regulate the market price.

Let us also assume that A produces one quarter at 3 pounds sterling, as it did heretofore. Let B likewise, as before, produce altogether $3\frac{1}{2}$ quarters at an individual price of production of 6 pounds sterling for its total output. Now, if an addition of 4 pounds sterling becomes necessary upon B (including the profit) in order to produce an additional quarter, whereas it might be produced upon A at $3\frac{3}{4}$ pounds sterling, then it would naturally be produced upon A, not upon B. Let us assume, then, that this additional quarter can be produced upon B with an additional cost of production of $3\frac{1}{2}$ pounds sterling. In this case $3\frac{1}{2}$ pounds sterling would become the regulating price for the entire production. B would now sell its product of $4\frac{1}{2}$ quarters at $15\frac{3}{4}$ pounds sterling. The cost of production of the first $3\frac{1}{2}$ quarters, or 6 pounds sterling, would have to be deducted from this, also that of the last quarter, or $3\frac{1}{2}$ pounds sterling, total $9\frac{1}{2}$ pounds sterling. This leaves a surplus profit for rent of $6\frac{1}{4}$ pounds sterling, as against the former $4\frac{1}{2}$ pounds sterling. In this case one acre of A would also yield a rent of $\frac{1}{2}$ pound sterling; but not the worst soil A, but the better soil B would regulate the price of production with $3\frac{1}{2}$ pounds sterling. Of course we assume here that new soil of the quality of A is not accessible in the same favorable location as that hitherto cultivated, but that

either a second investment of capital upon the already cultivated soil A is required at a higher cost of production, or the cultivation of still inferior soil, such as A — 1. As soon as differential rent No. II comes into action by successive investments of capital, the limits of the rising price of production may be regulated by better soil, and the worst soil, the basis of differential rent No. I, may also carry a rent. Under these circumstances all cultivated lands would pay a rent under a mere differential rent system. We should then have the following two Tables, in which we mean by the term cost of production the sum of the invested capital plus 20% profit, in other words, on every $2\frac{1}{2}$ pounds sterling of capital $\frac{1}{2}$ pound sterling of profit, total 3 pounds sterling.

Class of Soil	Acres	Cost of Production P. St.	Product Qrs.	Selling Price P. St.	Proceeds in Money P. St	Grain Rent Qrs.	Money Rent P. St.
A	1	3	1	3	3	—	—
B	1	6	3 1 2	3	10 1/2	1 1/2	4 1 2
C	1	6	5 1 2	3	16 1/2	3 1/2	10 1 2
D	1	6	7 1 2	3	22 1 2	5 1/2	16 1 2
Total	4	21	17 1/2	—	52 1/2	10 1/2	31 1/2

This is the condition of affairs, before the new capital of $3\frac{1}{2}$ pounds sterling is invested in B, which supplies only one quarter. After this investment has been made, we have the following condition: ,

Class of Soil	Acres	Cost of Production P. St.	Product Qrs.	Selling Price P. St.	Proceeds in Money P. St.	Grain Rent Qrs.	Money Rent P. St.
A	1	3	1	3½	3½	1/7	½
B	1	9½	4½	3½	15¾	1 11/14	6¼
C	1	6	5½	3½	19¼	3 11/14	13¼
D	1	6	7½	3½	26¼	5 11/14	20¼
Totals	4	24½	18½		64¾	11½	40¼

[This, again, is not quite correctly calculated. The capitalist renter of B has to meet a cost of production of $9\frac{1}{2}$ pounds sterling for the $4\frac{1}{2}$ quarters and besides $4\frac{1}{2}$ pounds sterling in rent, a total of 14 pounds sterling; average per quarter 3⅛ pounds sterling. This average price of his total

production thus becomes the regulating market price. According to this the rent upon A would amount to $\frac{1}{9}$ pound sterling instead of $\frac{1}{2}$ pound sterling and that upon B would remain $4\frac{1}{2}$ pounds sterling, as heretofore. $4\frac{1}{2}$ quarters at $3\frac{1}{9}$ pounds sterling make 14 pounds sterling, and if we deduct $9\frac{1}{2}$ pounds sterling of cost of production we have $4\frac{1}{2}$ pounds sterling left for surplus profit. We see, then, that in spite of the required change in figures this illustration shows the way in which the better rent paying soil, by means of differential rent No. II, may regulate the price and thus transform all soil, even a hitherto rentless one, into rent paying soil.— F. E.]

The grain rent must rise, as soon as the regulating price of production of the grain rises, that is, as soon as the quarter of grain rises upon the regulating soil, or the regulating investment of capital upon one of the various kinds of soil. It is the same as though all kinds of soil had become less productive, and as though they were producing only 5-7 quarter instead of one quarter with a new investment of $2\frac{1}{2}$ pounds sterling. Whatever they produce more in grain with the same investment of capital, is converted into a surplus product, in which the surplus profit and with it the rent are incorporated. Assuming that the rate of profit remains the same, the capitalist renter will have to buy less grain with his profit. The rate of profit may remain the same, if the wages do not rise, either because they are depressed to the physical minimum, below the normal value of labor-power, or because the other things needed for consumption by the laborer and supplied by the manufacturer have become relatively cheaper; or because the working day has been prolonged or has become more intensive, so that the rate of profit in other than agricultural lines of production, which, however, regulates the agricultural profit, has remained the same or has risen; or, finally, because there may be more constant and less variable capital employed in agriculture, even though the total capital invested be the same.

Now we have considered the first condition in which rent may arise upon the worst soil A without taking still worse soil under cultivation; that is, in which rent may arise out

of the difference between the old individual price of this land, which was hitherto the regulating price of production, and the new, higher, price of production, at which the last additional capital with less than normal productive power upon the better soil supplies the necessary additional product.

If the additional product had to be supplied by soil A — 1, which cannot produce one quarter at less than 4 pounds sterling, then the rent would have risen to one pound sterling upon A. But in this case the soil A — 1 would have taken the place of A as the worst cultivated soil, and A would have risen in the scale to the place of the lowest link in the series of rent paying soils. Differential rent No. I would have changed. This case, then, is outside of the consideration of differential rent II, which arises out of the different productivity of successive investments of capital upon the same piece of land.

But aside from this, differential rent may arise upon soil A in two other ways.

In the first place, it may arise so long as the price remains unchanged (any price, even a lower one compared to former ones), if the additional investment of capital creates a surplus product, which it must always do, on first sight, and up to a certain point, upon the worst soil.

In the second place, it may arise, if the productivity of the successive investments of capital upon soil A decreases.

The assumption in either case is that the increased production is required on account of the condition of the demand.

But from the point of view of differential rent, a peculiar difficulty arises here on account of the previously developed law, according to which it is always the individual average price of production per quarter in the total production (or the total investment of capital) which acts as the determining factor. In the case of soil A, however, it is not, as it is in the case of the better soils, a question of a price of production existing outside of it, which limits the equalization of the individual price of production and the general price of production, for new investments of capital. For the individual

price of production of A is precisely the general price of production regulating the market price.

Let us assume:

1) When productive power of successive investments of capital is increasing, that one acre of A will produce 3 quarters instead of 2 quarters with an investment of 5 pounds sterling of capital, corresponding to 6 pounds sterling of cost of production. The first investment of $2\frac{1}{2}$ pounds sterling supplies one quarter, the second 2 quarters. In this case 6 pounds sterling of cost of production will correspond to a product of 3 quarters, so that the average price of one quarter will be 2 pounds sterling. If the 3 quarters are sold at 2 pounds sterling per quarter, then A does not produce any rent any more than it did before. Only the basis of differential rent No. II has been altered. The regulating price of production is now 2 pounds sterling instead of 3 pounds. A capital of $2\frac{1}{2}$ pounds sterling produces now an average of $1\frac{1}{2}$ quarters upon the worst soil instead of 1 quarter, and this is now the official productivity for all better soils with an investment of $2\frac{1}{2}$ pounds sterling. A portion of the ordinary surplus product now passes over into the formation of their necessary product, just as a portion of their surplus profit now passes over into the formation of the average profit.

But if the calculation is made as it is upon the better soils, where the average calculation does not alter anything in the absolute surplus, because the general price of production is the limit of the investment of capital, then one quarter of the first investment of capital costs 3 pounds sterling and the 2 quarters of the second investment costs only $1\frac{1}{2}$ pounds sterling. This would give rise to a grain rent of one quarter and a money rent of 3 pounds sterling upon A, but the 3 quarters would be sold at the old price of 9 pounds sterling all together. If a third investment of $2\frac{1}{2}$ pounds sterling of capital were made at the same productivity as the second investment, then the total production would be 5 quarters at 9 pounds sterling of cost of production. If the individual average price of A should remain the regulating price, then one quarter would be sold at $1\frac{4}{5}$ pound sterling. The average

price would have fallen once more, not through a new rise of the productivity of the third investment of capital, but merely through the addition of a new investment of capital with the same additional productivity as the second one. Instead of raising the rent upon the rent paying soils, the successive investments of capital of a higher, but sustained, fertility upon the soil A would lower the price of production and with it the differential rent upon all other soils in the same proportion, under conditions remaining the same. On the other hand, if the first investment of capital, which produces one quarter at 3 pounds sterling, should remain in force by itself, then 5 quarters would be sold at 15 pounds sterling, and the differential rent of the later investments of capital upon soil A would amount to 6 pounds sterling. The additional capital per acre of soil A, whatever might be the manner of its application, would be an improvement in this case, and it would make the original portion of capital more productive. It would be nonsense to say that $\frac{1}{3}$ of the capital had produced one quarter and the other $\frac{2}{3}$ four quarters. For 9 pounds sterling per acre would always produce 5 quarters, while 3 pounds sterling would produce only one quarter. Whether a rent would arise here or not, whether a surplus profit would be made or not, would depend wholly upon circumstances. Normally the regulating price of production would fall. This would be the case, if this improved, but more expensive cultivation of soil A should take place only for the reason that it takes place upon all better soils, in other words, if a general revolution in agriculture should occur. And the assumption in that case would be that this soil is worked with 6 or 9 pounds sterling instead of 3 pounds. This would apply particularly, if the greater part of the cultivated acres of soil A, by which the bulk of the supply of this country is furnished, should be handled by this new method. But if the improvement should extend only to a small portion of the area of A, then this better cultivated portion would yield a surplus profit, which the landlord would be quick to transform wholly or in part into rent and fix permanently in the form of rent. In this way a rent might be gradually formed upon

all soil of the A quality, in proportion as more and more of the area of this soil is taken under cultivation by the new method, and the surplus productivity might be confiscated wholly or in part, according to market conditions. The equalization of the price of production of soil A to the average price of its product at an increased investment might thus be prevented by the fixation of the surplus profit of this increased investment of capital in the form of rent. If so, this would be once again an illustration of the way in which the transformation of surplus profit into ground-rent, in other words, the intervention of property in land, raises the price of production, as we have already noticed in the case of the better soils upon which the productivity of the additional capitals decreased, so that here the differential rent would not be a mere result of the difference between the individual and the general price of production. It would prevent, in the case of soil A, the identification of both prices in one, because it would interfere with the regulation of the price of production by the individual price of production of A. It would maintain a higher price of production than the necessary one and thus create a rent. Even if grain were freely imported from abroad, the same result could be brought about or perpetuated by compelling the tenants to use soil capable of competing in the raising of grain at the price of production regulated from abroad for other purposes, for instance for pastures, so that only rent paying soils could raise grain, that is, only soils whose individual average price of production per quarter would be below the price of production determined from abroad. On the whole it may be assumed that the price of production will fall, but not to the level of its average. Rather will it be higher than the average, but below the price of production of the worst cultivated soil A, so that the competition of new lands of the class A is held back.

2) When the productive power of the additional capitals is decreasing, let us assume that soil A — 1 can produce the additional quarter only at 4 pounds sterling, whereas soil A produces it at $3\frac{3}{4}$ pounds sterling, that is, more cheaply than the lesser soil, but still more dearly than the quarter produced

by the first investment of capital upon it. In this case the total price of the two quarters produced upon A would be $6\frac{3}{4}$ pounds sterling, and the average price per quarter $3\frac{3}{8}$ pounds sterling. The price of production would rise, but only by $\frac{3}{8}$ pound sterling, whereas it would rise by another $\frac{3}{8}$, or to $3\frac{3}{4}$ pounds sterling, if the additional capital were invested upon new soil, which could produce at $3\frac{3}{4}$ pounds sterling and thus bring about a proportional raise of all other differential rents.

The price of production of $3\frac{3}{8}$ pounds sterling per quarter of A would thus be brought to the figure of its average price of production with an increased investment of capital, and would be the regulating price; it would not yield any rent, because it would not produce any surplus profit.

However, if this quarter, produced by the second investment of capital, were sold at $3\frac{3}{4}$ pounds sterling, then the soil A would yield a rent of $\frac{3}{4}$ pound sterling, and it would do so upon all acres of A, even those with no additional investment of capital, which would still produce one quarter at 3 pounds sterling. So long as any uncultivated fields of A remain, the price could rise only temporarily to $3\frac{3}{4}$ pounds sterling. The competition of new fields of A would hold the price of production at 3 pounds sterling, until all lands of the A class would be exhausted, whose favorable location would enable them to produce a quarter at less than $3\frac{3}{4}$ pounds sterling. This would be a likely assumption, although the landlord will not let any tenant have any land free of rent, if one acre of A pays rent.

It would depend once more upon the greater or smaller generalization of the second investment of capital in the available soil A, whether the price of production shall be brought down to an average or whether the individual price of production of the second investment of capital shall be regulating at $3\frac{3}{4}$ pounds sterling. This last case will take place only when the landlord gets time to fix the surplus profit, which would be made until the demand would be satisfied at the price of $3\frac{3}{4}$ pounds sterling, permanently in the form of rent.

Concerning the decreasing productivity of the soil with successive investments of capital, see Liebig. We have seen that the successive decrease of the surplus productive power of the investments of capital always increases the rent per acre, so long as the price of production remains the same, and this may take place even when the price of production is falling.

But in a general way the following remarks may be made.

From the point of view of the capitalist mode of production there is always a relative increase in the price of products, when a product cannot be secured unless an expense is incurred, a payment made, which did not have to be met formerly. For by a reproduction of the capital consumed in production we mean only the reproduction of values, which were represented by certain means of production. Natural elements passing into production as agencies, no matter what role they play in production, do not enter into the problem as parts of capital, but as free gifts of nature to capital, that is, as a free natural productivity of labor, which, however, appears as a productive power of capital, as do all other productive powers under the capitalist system. Therefore, if such a natural power, which originally does not cost anything, takes part in production, it does not count in the determination of prices, so long as the product supplied by its help suffices for the demand. But if a larger product is demanded than that which can be supplied by the help of this natural power, so that the additional product must be created without this power, or by assisting it with human labor power, then a new additional element enters into capital. A relatively larger investment of capital is required for the purpose of securing the same product. All other circumstances remaining the same, the price of the product is raised.

(From a manuscript "Started about the Middle of February, 1876.")

Differential Rent and Rent as a mere interest on capital invested in the soil.

The so-called permanent improvements — which change the physical, and in part also the chemical, condition of the soil by means of operations requiring an expenditure of capital, and which may be regarded as an incorporation of capital in the soil — nearly all amount to giving to a certain piece of land in a certain limited locality such qualities as are possessed by some other piece of land at some other locality, sometimes quite near to the other one, by nature. One piece of land is by nature level, another has to be leveled; one possesses natural drainage, another has to be drained artificially: one has naturally a deep top soil, another must be artificially deepened; one clay soil is naturally mixed with a proper modicum of sand, another has to be treated for the purpose of making it so; one meadow is irrigated or moistened naturally, another requires labor to get it into this condition, or in the language of bourgeois economists, it requires capital.

It is indeed a very exhilarating theory, which calls rent by the name of interest in the case of one piece of land, whose comparative advantages have been acquired, whereas it does not do so in the case of a piece of land which has the same advantages naturally. (As a matter of fact, this is distorted in practice into saying that because rent really coincides in the one case with interest, it must falsely be called interest in cases where this is positively not the case.) However, the land yields a rent after the investment of capital, not because capital has been invested, but because the investment of capital makes this land more productive than it was formerly. Assuming that all land requires this investment, then every piece of land which has not received it must first pass through this stage, and the rent which the soil already endowed with capital yields (the interest which it may pay in a certain case), constitutes as much a differential rent as though it possessed this advantage by nature and the other land had to acquire it artificially.

This rent, which may be resolved into pure interest, becomes altogether a differential rent, as soon as the invested capital is sunk in the land. Otherwise the same capital would have to appear twice as capital.

It is one of the most amusing incidents, that all opponents of Ricardo, who combat the determination of value exclusively by labor, criticize in the case of differential rent arising from differences of soil the determination of value by nature instead of by labor. But at the same time they credit the location of the land with this determination, or perhaps, even more, the interest on capital sunk in the land during its cultivation. The same labor produces the same value in the product created during a certain time. But the magnitude, or the quantity, of this product, and consequently also that portion of value, which falls upon some aliquot part of this product, depends only upon the quantity of the product, so long as the quantity of labor is given, and the quantity of the product, in its turn, depends upon the productivity of the given quantity of labor, not upon the size of this quantity. It is immaterial, whether this productivity is due to nature or to society. Only in the case in which the productivity costs labor, and consequently capital, does it increase the cost of production by a new element, but this is not the case with nature alone.

CHAPTER XLV.

ABSOLUTE GROUND-RENT.

In the analysis of ground-rent we proceeded from the assumption, that the worst soil does not pay any ground-rent, or, to put it more generally, that only such land pays ground-rent as produces at an individual price of production which is below the price of production regulating the market, so that in this way a surplus profit arises which is transformed into rent. It should be remembered that the law of differential rent as such is entirely independent of the correctness or incorrectness of this assumption.

Let us call the general price of production, by which the market is regulated, P. Then P coincides for the product of the worst soil A with its individual price of production; that

is to say, its price pays for the constant and variable capital consumed in its production plus the average profit (profits of enterprise plus interest).

The rent amounts to zero in this case. The individual price of production of the next better soil B is equal to P′, and P is larger than P′; that is P pays more than the actual price of production of the product of the soil B. Now let us assume that P minus P′ is d; in this case d, the excess of P over P′, is a surplus profit, which the tenant realises upon class B of soil. This d is converted into rent, which must be paid to the landlord. Let the actual price of production of the third class of soil, C, be P″, and P minus P″ equal to 2d; then this 2d is converted into rent; likewise let the individual price of production of the fourth class of soil, D, be P‴, and P minus P‴ equal to 3d, which is converted into ground-rent, etc. Now take it that the assumption of a rent upon soil A equal to zero and of a price of production equal to P plus zero is wrong. Rather let the class A of soil also pay a rent, equal to r. In that case we come to two conclusions.

First: The price of the product of the land of class A would not be regulated by its price of production, but by containing a surplus above it would come to P + r. For assuming the capitalist mode of production to be in a normal condition, that is, assuming that the surplus r, which the tenant pays to the landlord, is neither a deduction from wages nor from the average profit of capital, it can be paid only by selling the product above its price of production, so that a surplus profit arises, which the tenant might keep if he did not have to turn it over to the landlord as a rent. In that case the regulating market price of the total product of all soils existing on the market would not be the price of production, which capital generally makes in all spheres of production, which is a price equal to the cost of production plus the average profit, but it would be the price of production plus the rent, P + r, and not merely P. For the price of the product of soil A expresses generally the limit of the regulating general market price, at which the total product can

be supplied, and to that extent it regulates the price of this total product.

Secondly: Nevertheless the law of differential rent would not be suspended in this case, although the general price of the products of the soil would be essentially modified. For if the price of the product of class A should be $P + r$, and this should be the general market price, then the price of class B would be likewise $P + r$, and so would be the price of classes C, D, etc. But since $P - P' = d$, in the case of class B, it is evident that $(P + r) - (P' + r)$ is also equal to d, and $P - P''$ in the case of class C would mean that $(P + r) - (P'' + r)$ is equal to 2d, and $P - P'''$ in the case of class D would mean that the formula $(P + r) - (P''' + r)$ is equal to 3d, and so forth. In other words, the differential rent would still be regulated by the same law as before, although the rent would contain an element independent of this law and would show a general increase in the same way as would the price of the products of the soil. It follows, then, that no matter what may be the condition of the rent upon the least fertile lands, the law of differential rent is not only independent of it, but that also the only manner of viewing differential rent in keeping with its character, is to place the rent of class A at zero. Whether this is zero or larger than zero, is immaterial, so far as the differential rent is concerned, and is not considered in the calculation.

The law of differential rent, then, is independent of the results of the following investigations.

If we now go more deeply into the question, as to what is the sound basis of the assumption that the product of the worst soil A does not pay any rent, we necessarily get the answer: If the market price of the products of the land, say of grain, reaches such a level that an additional investment of capital in the class A of soils pays the ordinary price of production and yields the ordinary average profit to the capitalist, then this is sufficient incentive for investing additional capital in soil of class A. In other words, this condition satisfies the capitalist that new capital may be invested at the average profit and employed in the normal manner.

It should be noted here that in this case, likewise, the market price must be higher than the price of production of A. For as soon as the additional supply has been created, the relation between supply and demand has been altered. Formerly the supply was insufficient, now it is sufficient. So the price must fall. In order to fall, it must have been higher than the price of production of A. But the lesser fertility of the newly added soils of class A brings it about that the price does not fall quite as low as it was at the time when the price of production of the class B regulated the market. The price of production of A forms the limit, not for the temporary, but for the relatively permanent rise of the market price.

On the other hand, if the newly cultivated soil is more fertile than that of the hitherto regulating class A, yet only to the extent of satisfying the increased demand, then the market price remains unchanged. The inquiry as to whether the lowest class of land pays any rent, nevertheless coincides also in this case with our present inquiry, for here again the assumption that class A does not pay any rent must be explained out of the fact that the market price satisfies the capitalist tenant that this price will cover the invested capital plus the average profit, in brief, that the market price will cover the price of production of his commodities.

At any rate, the capitalist tenant can cultivate soil of class A under these conditions, in so far as he has any decision in this matter in his capacity as a capitalist. The prerequisite for a normal self-expansion of capital is now present upon soil A. But the fact that the average conditions of self-expansion would now enable the capitalist tenant to invest capital in soil of the class A if he did not have to pay any rent, does not imply that such land is at the disposal of the capitalist without any further ceremony. The circumstance that the capitalist tenant might invest his capital at the average profit, if he did not have to pay any rent, is no incentive for the landlord to lend his land to the tenant gratis and be so philanthropic as to grant free credit to this friend in business. To assume that this would be done

would be to do away with private property in land, for its existence is precisely an obstacle to the investment of capital and to the liberal self-expansion of capital through land. This obstacle does not fall by any means before the simple reflection of the tenant that the condition of grain prices would enable him to get the average profit out of an investment of capital in class A of soil, if he did not have to pay any rent, in other words, if he could proceed as though private property in land did not exist. But differential rent is based upon the fact that private property in land exists, that the land monopoly is an obstacle of capital, for without it the surplus profit would not be converted into ground-rent and would not fall into the hands of the landlord instead of those of the capitalist tenant. Private property in land remains as an obstacle, even where differential rent as such is not paid, that is, upon soils of the class A. If we observe the cases, in which capital may be invested in the land, in a country with capitalist production, without paying any rent, we shall find that they imply, all of them, a practical abolition of private property in land, even if not a legal abolition, a condition which is found only under very definite circumstances, which are in their very nature accidental.

First: This may take place when the landlord is himself a capitalist, or the capitalist himself a landlord. In this case he may himself exploit his land, as soon as the market price shall have risen sufficiently to enable him to get the price of production, that is, cost of production plus the average profit, out of what is now land of class A. But why? Because for himself private property in land is not an obstacle to the investment of his capital. He can treat his land simply as an element of nature, and can listen wholly to considerations of expediency concerning his capital, to capitalist considerations. Such cases occur in practice, but only as exceptions. Just as the capitalist cultivation of the land presupposes the separation of the active capital from property in land, so it excludes as a rule the self-management of property in land. It is evident, that

the opposite is only an exception. If the increased demand after grain requires the cultivation of a larger area of land of the class A than is in the hands of self-managing proprietors, in other words, if a part of such land must be rented in order to be cultivated at all, then this hypothetical conception of the obstacle created by private property in land for capital and its investment at once collapses. It is an absurd contradiction to start out from the differentiation between capital and land, capitalist tenants and landlords, which corresponds to the capitalist system, and then to turn around and assume that the landlords, as a rule, exploit their own land in all cases and to the full extent, where capital would not get a rent out of the cultivation of the soil, if private property in land were not separate and distinct from it. (See the passage from Adam Smith concerning mining rent, quoted further along.) Such an abolition of private property in land is accidental. It may or may not occur.

Secondly: In the total area of some rented land there may be certain portions, which do not pay any rent under the existing condition of market prices, so that they are virtually loaned gratis, although the landlord does not look upon it in that light, because he does not consider the special rent of some particular patches in the total rental of his rented land. In such a case, so far as such patches are exempt from rent, private property as an obstacle to the investment of capital is obliterated for the capitalist tenant, and his contract with the landlord implies as much. But he does not pay any rent for such patches for the simple reason that he pays rent for the land to which they belong. The assumption in this case deals with a combination, in which the worse land of the class A is not an independent resort by which to supply the missing product, but rather an inseparable part of some better land. But the case to be investigated is precisely that in which certain pieces of land of class A are independently cultivated, and must be rented separately under the general conditions of capitalist production.

Thirdly: A capitalist tenant may invest additional cap-

ital upon the same rented land, although the additional product secured in this way nets him only the price of production at the prevailing market prices, so that he gets only the average profit, but does not get any surplus profit with which to pay rent. In that case he pays ground-rent with a portion of the capital invested in the land, but does not pay any ground-rent with the remainder of his invested capital. How little this assumption solves the problem in question, is seen by the following considerations: If the market price (and the fertility of the soil) enables him to obtain a larger yield with his additional capital, so that this additional capital secures for him not merely the price of production, the same as his old capital, but also a surplus profit, then he pockets this surplus profit himself so long as his present lease runs. But why? Because the obstacle of private property has been eliminated for his capital during the time of his lease. But the simple fact, that new and inferior soil must be independently cleared and independently rented, in order to secure this surplus profit for him, proves that the investment of additional capital upon the old soil no longer suffices to fill the required increased demand. One assumption excludes the other. It is true that one might say: The rent of the worst soil A is itself a differential rent, compared either to the land cultivated by the owner himself (which is an accidental exception), or with the additional investment of capital upon the old leaseholds which do not produce any rent. However, this would be a differential rent, which would not arise from the difference in fertility of the various classes of soil, and which would, therefore, not be based upon the assumption that class A of soil does not pay any rent and sells its product at the price of production. And furthermore, the question as to whether additional investments of capital upon the same leasehold produce any rent or not is quite immaterial for the question, whether the new soil of class A, which is about to be taken under cultivation, pays any rent or not, just as it is immaterial for the organization of a new and independent manufacturing business whether another manufacturer of the same line of busi-

ness invests a portion of his capital in interest-bearing papers, because he cannot use all of it in his business; or whether he makes certain improvements, which do not secure the full profit for him, but at least more than interest. This is immaterial for him. The new establishments must produce the average profit and are built on this assumption. It is true that the additional investments upon the old leaseholds and the additional cultivation of new land of class A mutually restrict one another. The limit, up to which additional capital may be invested upon the same leasehold under less favorable conditions of production, is determined by the new competing investments upon soil of class A; on the other hand, the rent which may be produced by this class of soil is limited by the competing additional investments of capital upon the old leaseholds.

But all these false subterfuges do not solve the problem, which in simple language consists of this: Assuming the market price of grain (which shall be typical of all products of the soil in this inquiry) to be sufficient for the purpose of taking portions of soil of class A under cultivation and securing the price of production (cost of production plus average profit) by means of the capital invested in these new fields; in other words, assuming the conditions for the normal self-expansion of capital upon the soil A to be existent, is this sufficient cause for making the investment of such capital really possible? Or must the market price rise to a point where even the worst soil A will produce a rent? Does the monopoly of the land owner place an obstacle in the way of the capitalist who wants to invest, an obstacle which would not exist from the capitalist's point of view without that monopoly in land? The conditions, under which this question is put, show that the question as to whether capital may really be invested in soil of class A, which would produce the average profit, but no rent, is not at all solved by the fact that, for instance, additional investments upon the old leaseholds may exist, which produce only the average profit but no rent at the prevailing market prices. The question still remains unanswered. The fact that the additional invest-

ments, which do not produce any rent, do not satisfy the demand is proved by the necessity of taking new land under cultivation out of class A. If the additional cultivation of land of class A takes place only to the extent that it produces a rent, that is, more than the price of production, then only two cases are possible. Either the market price must be such that even the last additional investments of capital upon the old leaseholds produce a surplus profit, which may be pocketed by the tenant or by the landlord. This raise in price and this surplus profit of the last additional investment of capital would then be a result of the fact that soil A cannot be cultivated without producing a rent. For if the price of production were sufficient to bring about a cultivation of land A, if the mere average profit were enough for that, then the price would not have risen to this point and the competition of new lands would have manifested itself as soon as they could produce just this price of production. The additional investments upon the old leaseholds, which do not produce any rent, would then have to compete with the investments upon soil A, which likewise do not produce any rent. Or, the last investments upon the old leaseholds may not produce any rent, but still the market price may have risen sufficiently to make the cultivation of soil A possible and to get a rent out of it. In this case, the additional investment of capital, which does not produce any rent, would be possible only for the reason that soil A could not be cultivated until the market price enabled it to produce a rent. Without this condition its cultivation would have begun when prices stood lower; and those later investments of capital upon the old leaseholds, which require a high market price in order to produce the ordinary profit without any rent, could not have taken place. For they produced only the average profit at the high market prices. At a lower market price, which would have become the regulating market price of production from the time that soil A would have been taken under cultivation, those later investments upon the old leaseholds could not have produced this average profit, and this means that the investments would not have been made under such

conditions. In this way, the rent of soil A would indeed form a differential rent, compared to the investments upon the old leaseholds, which do not produce any rent. But the fact that the area of A forms such a differential rent is but a consequence of the condition that this area is not taken under cultivation at all, unless it produces a rent. The first condition in this case is that the necessity of this rent, which is not based upon any differences of soil, must exist and form a barrier to the possible investment of additional capitals upon the old leaseholds. In either case, the rent of soil A would not be a simple consequence of the rise in grain prices, but on the contrary, the fact that the worst soil must produce a rent in order to become available for cultivation would be the cause of a rise in the price of grain to the point at which this condition may be fulfilled.

The differential rent has this peculiarity, that the landlord merely catches the surplus profit which would otherwise go into the pocket of the tenant, and which the tenant may actually pocket under certain circumstances during the time of his lease. The property in land is here merely the cause of the transfer of a portion of the price of the product, which arises without any active participation of the landlord in production and resolves itself into surplus profit. This transfer of a portion of the price from one individual to another, from the capitalist to the landlord, is due to private property in land. But private ownership of land is not the cause which creates this portion of the price, or brings about the rise in the price, upon which it is conditioned. On the other hand, if the worst soil A cannot be cultivated — although its cultivation would yield the price of production — until it produces something in excess of the price of production, then private property in land is the creative cause of this rise in price. Private property in land itself has created rent. This fact is not altered, if, as in the second case mentioned, the rent now produced by soil A is a differential rent compared with the last additional investment of capital upon the old leaseholds, which pays only the price of production. For the circumstance, that soil A cannot be cultivated, until

the regulating price of production has risen high enough to admit of a rent for soil A, is in this case the sole reason of the rise of the market price to that level, which enables the last investments upon the old leaseholds to secure the price of production, by means of which a rent is obtained from soil A. The fact that this soil has to pay any rent at all is in this case the cause which creates a differential rent between soil A and the last investment upon the old leaseholds.

Speaking in general of the fact that soil of class A, under the assumption that the price of grain is regulated by the price of production, does not pay any rent, we mean rent in the categorical sense of the word. If the tenant pays a rent, which is either a deduction from the normal wages of his laborers, or from his own normal average profit, then he does not pay a rent which is clearly distinguished from wages and profit in the price of his product. We have already indicated that this takes place continually in practice. To the extent that the wages of the agricultural laborers in a certain country are continually depressed below the normal level of wages, so that a part of the wages, being deducted from them, passes generally over into the rent, this is no exception for the tenant upon the worst kind of soil. In the same price of production, which makes the cultivation of the worst soil possible, these low wages already form a constituent element, and the sale of his product at the price of production does not enable the tenant upon this soil to pay any rent. The landlord might rent his land also to some laborer, who may be satisfied to pay all or a part of that in the form of rent which he may get in the selling price above the wages. In all these cases, however, no real rent is paid, but merely lease money. But wherever conditions correspond to the capitalist mode of production, rent and lease money must coincide. It is precisely this normal condition which must be analyzed here.

A reference to colonial conditions proves even less for our problem than do the above-mentioned cases, in which actual investments of capital under conditions of capitalist production may take place upon the land without producing any rent. What makes a colony of a colony — we have in mind

only true agricultural colonies — is not merely the vast area of fertile lands in a natural state. It is rather the circumstance that these lands are not appropriated, are not brought under private ownership. It is this which makes the enormous difference between the old countries and the colonies, so far as the land is concerned, it is this nonexistence, legal or actual, of private property in land, as Wakefield remarks correctly;[128] and long before him the elder Maribeau, the physiocrat, and other older economists had discovered. It is quite immaterial here, whether the colonists take possession of the land without further ceremony, or whether they pay to the state a fee for a valid title to the land under the title of a nominal price of land. It is also immaterial, that already settled colonists may be legally the owners of land. In fact the land ownership is not an obstacle to the investment of capital here, nor to the employment of labor upon land without any capital. The settling of a part of the land by the established colonists does not prevent the newcomers from employing their capital or their labor upon new land. Therefore, if we are asked to investigate the influence of private ownership of land upon the prices of the products of land and upon the rent in places where such ownership is an obstacle to the investment of capital, it is very absurd to speak of free bourgeois colonies, in which neither the capitalist mode of production in agriculture, nor the form of private property belonging to it, exist, and in which the latter does not exist at all in fact. Ricardo is an illustration of this in his chapter on ground-rent. In the beginning he says that he is going to investigate the effect of the appropriation of land upon the value of the products of the soil, and immediately after that he takes for an illustration the colonies, assuming that real estate exists in a relatively elementary form and that its exploitation is not limited by the monopoly of private ownership in land.

The mere legal property in land does not create any ground-

[128] Wakefield, *England and America*, London, 1833. Compare also *Capitel*, Volume I, Chapter XXVII.

rent for the landlord. But it gives him the power to withdraw his land from exploitation until the economic conditions permit him to utilize it in such a way that it will yield him a surplus, whenever the land is used either for agriculture proper or for other productive purposes, such as buildings, etc. He cannot increase or decrease the absolute quantity of its field of employment, but he can do so with its marketable quantity. For this reason, as Fourier has already remarked, a characteristic fact in all civilized countries is that a comparatively considerable portion of the land always remains uncultivated.

Assuming, then, that the demand requires the opening up of new lands, and that these lands are less fertile than those hitherto cultivated, will the landlord rent such lands for nothing, just because the market price of the products of the soil has risen high enough to pay to the tenant the price of production on his investment in this land and enable him to reap the average profit? By no means. The investment of capital must net him a rent. He does not rent his land until he can get lease money for it. Therefore the market price must have risen above price of production to the point $P + r$, so that a rent can be paid to the landlord. Since the real estate does not net any income, according to our assumption, until it is rented, so that it is economically valueless until then, a small rise of the market price above the price of production will suffice to bring the new land of the worst class upon the market.

The question is now: Does it follow from the ground-rent of the worst soil, which cannot be derived from any difference of fertility, that the price of the products of the soil is necessarily a monopoly price in the ordinary meaning of the term, or a price, into which the rent enters like a tax, only with the distinction that the landlord levies the tax instead of the state? It is a matter of course that this tax has certain definite economic limits. It is limited by the additional investments of capital upon the old leaseholds, by the competition of the products of the soil of foreign countries, which are imported free of duty, by the competition of the land-

lords among themselves, and finally by the wants and the solvency of the consumers. But this is not the point. The point is whether the rent paid by the worst soil passes into the price of its products, which price regulates the general market price according to our assumption, and whether it enters into this price in the same way as a tax enters into the price of commodities which are dutiable, in other words, whether this rent enters into the price as an element independent of its value.

This does not necessarily follow by any means, and the contention that it does has been made only because the distinction between the value of commodities and their price of production had not been understood up to the present. We have seen that the price of production of a commodity is by no means identical with its value, although the prices of production of all commodities, considered as a whole, are regulated only by their total value, and although the movement of the prices of production of the various kinds of commodities, taking all other circumstances as equal, is controlled exclusively by the movement of their values. It has been demonstrated that the price of production of a commodity may stand above or below its value, and coincides but rarely with its value. Hence the fact that the products of the soil are sold above their prices of production does not prove by any means that they are sold above their values. Neither does the fact that the products of industry are, on an average sold at their prices of production, prove that they are sold at their values. It is possible that the products of agriculture are sold above their price of production and below their value, while many products of industry bring the price of production only because they are sold above their value.

The relation of the price of production of a certain commodity to its value is exclusively determined by the proportion, in which the variable part of the capital with which it is produced stands to its constant part, or by the organic composition of the capital producing it. If the composition of the capital in a certain sphere of production is lower than that of the social average capital, in other words, if its vari-

able portion, which is used for wages, is relatively larger than its constant portion, which is invested in material requirements of production, compared to the social average capital, then the value of its products must stand above their price of production. In other words, such a capital, employing more living labor, produces at the same rate of exploitation of labor more surplus-value, and therefore more profit, than an equally large aliquot portion of the social average capital. The value of its products stands, therefore, above their price of production, since this price of production is equal to the cost of production plus the average profit, and the average profit is lower than the profit produced in these commodities. The surplus-value produced by the social average capital is smaller than that produced by a capital of this lower composition. On the other hand, when the capital invested in a certain sphere of production is of higher than average composition, then the case is reversed. The value of the commodities produced by it stands below their price of production, and this is generally the case with the products of the most highly developed industries.

If the capital in a certain sphere of production is of a lower composition than the social average capital, then this is primarily an expression of the fact that the productive power of the social labor in this particular sphere of production is below the average; for the prevailing degree of productive power shows itself in the relative preponderance of the constant over the variable capital, or in the continual decrease of the portion used in a certain capital for wages. On the other hand, if the capital in a certain sphere of production is of a higher composition, then it expresses a development of the productive power above the average.

Leaving aside the work of artists, which is naturally excluded from our discussion, it is a matter of course that different spheres of production require different proportions of constant and variable capital according to their technical peculiarities, and that living labor must occupy more room in some, less room in others. For instance, in the extractive industries, which must be clearly distinguished from agri-

culture, raw material as an element of constant capital is wholly absent, and even the auxiliary material plays only rarely an important role in them. Nevertheless the progress of development may be measured also in them by the relative increase of the constant over the variable capital.

If the composition of the capital in agriculture proper is lower than that of the social average capital, then this would be on its face an expression of the fact that in countries with a developed production agriculture has not progressed as far as the industries which work up its products. This fact could be explained, aside from all other economic circumstances which are of paramount importance, from the earlier and more rapid development of mechanical sciences, and especially by their application, compared to the later and partly quite recent development of chemistry, geology and physiology, and particularly their application to agriculture. For the rest it is an indubitable and long known fact[129] that also the progress of agriculture expresses itself steadily in a relative increase of the constant over the variable capital. Whether in a certain country with capitalist production, for instance in England, the composition of the agricultural capital is lower than that of the social average capital, is a question which can be decided only by statistics, and which need not be discussed in detail for the purposes of this inquiry. So much is theoretically accepted that the value of the agricultural products cannot be higher than their price of production unless this condition obtains. In other words, a capital of a certain size in agriculture produces more surplus-value, or what amounts to the same, sets in motion and commands more surplus-labor (and with it employs more living labor) than a capital of the same size in industry of social average composition.

This assumption, then, suffices for that form of rent which we are analyzing here, and which can take place only so long as this assumption holds good. Wherever this assumption falls, the form of rent corresponding to it falls likewise.

However, the mere fact of an excess of the value of agri-

[129] See Dombasle and R. Jones.

cultural products over their price of production would not suffice in itself for the explanation of the existence of a ground-rent, which is independent of differences of fertility or of successive investments of capital upon the same land, a rent which is to be clearly differentiated from differential rent, and which we may therefore call absolute rent. Quite a number of manufactured products have the peculiarity that their value is higher than their price of production, and yet they do not produce any excess above the average profit, a surplus profit, which might be converted into rent. On the other hand, the existence and meaning of the price of production and of the average rate of profit which it implies rest upon the fact that the individual commodities are not sold at their value. The prices of production arise from an equalization of the values of commodities. This equalization after restoring their respective capital values to the various spheres of production, in which they were consumed, distributes the entire surplus-value, not in proportion as it has been produced in the individual spheres of production and incorporated in their commodities, but in proportion to the magnitude of the capital invested in them. Only in this way is an average profit brought about and with it the price of production, whose characteristic element this average profit is. It is the continual tendency of the capitals to bring about this equalization in the distribution of the surplus-value produced by the total capital by means of competition, and to overcome all obstacles to this equalization. This implies the tendency to permit only such surplus profits as arise under all circumstances, not from differences between the values and the prices of production of the commodities, but rather from the general prices of production, which regulates the market and from the individual prices of production, which differ from it. In other words, only such surplus profits are tolerated, which occur within a certain sphere of production and not such as occur between two different spheres of production, so that they do not touch the general prices of production of the different spheres, or their general rate of profit, but which

rather have for their basis the conversion of values into prices of production and into an average rate of profit for the whole. This condition rests, however, as previously explained, upon the continually changing proportional distribution of the total social capital among the various spheres of production, upon the unremitting emigration and immigration of capitals, upon their transfer from one sphere to another, in short upon their free movement between the various spheres of production, which represent so many available fields of investment for the independent constituents of the total capital of society. And the other assumption in this case is that no barrier, or at least only a temporary and accidental barrier, interferes with the competition of the capitals, for instance in some sphere of production, in which the value of the commodities is higher than their prices of production, or where the produced surplus-value is larger than the average profit, so that nothing prevents the reduction of value to a price of production and the proportional distribution of the excess of surplus-value of this sphere of production among all spheres exploited by capital. But if the reverse happens, if capital meets some foreign power, which it cannot overcome, or which it can but partially overcome, and which limits its investment in certain spheres, admitting it only under conditions which wholly or partly exclude that general equalization of surplus-value to an average profit, then it is evident that the excess of the value of commodities in such spheres of production over their prices of production would give rise to a surplus profit, which could be converted into rent and made independent as such compared to profit. Such a foreign power is private ownership of land, when it builds obstacles against capital in its endeavor to invest in land, such a power is the landlord in his relation to the capitalist.

Private property in land is then the barrier which does not permit any new investment of capital upon hitherto uncultivated or unrented land without levying a tax, in other words, without demanding a rent, although the land to be taken under new cultivation may belong to a class which does not produce any differential rent, and which, were it not for the inter-

vention of private property in land, might have been cultivated at a small increase in the market price, so that the regulating market price would have netted to the cultivator of this worst soil nothing but his price of production. But on account of the barrier raised by private property in land, the market price must rise to a point, where the land can pay a surplus over the price of production, in other words, where it can pay a rent. Now, since the value of the commodities produced by agricultural capital is higher than their price of production, as we have assumed, this rent (with the exception of one case which we shall discuss immediately) forms the excess of the value over the price of production, or a part of it. Whether the rent consumes the entire difference between the value and the price of production, or only a greater or smaller part of it, will depend wholly upon the relation between supply and demand and upon the area of the new land taken in cultivation. So long as the rent is not equal to the excess of the value of agricultural products over their price of production, a portion of this excess would always enter into the general equalization and proportional distribution of all surplus-value among the various individual capitals. As soon as the rent is equal to the excess of the value over the price of production, this entire portion of the surplus-value over and above the average profit would be withdrawn from the equalization. But whether this absolute rent is equal to the whole surplus of value over the price of production, or only equal to a part of it, the agricultural products would always be sold at a monopoly price, not because their price would exceed their value, but because their price would be equal to their value, or because their price would be lower than their value but higher than their price of production. Their monopoly would consist in the fact that they are not, like other products of industry whose value is higher than the general price of production, leveled to the plane of the price of production. Since one portion of the value and of the price of production is an actually existing constant element, namely the cost price, representing the capital k consumed in production, their

difference consists in the other, the variable, portion, the surplus-value, which amounts to p in the price of production, that is, to the profit which is equal to the total surplus-value calculated on the social capital and on every individual capital as an aliquot part of the social capital. This profit equals in the value of commodities the actual surplus-value created by this particular capital, and forms an integral part of the value of commodities created by this capital. If the value of commodities is higher than their price of production, then the price of production is k + p, the value k + p + d, so that p + d represents the surplus-value contained in it. The difference between the value and the price of production is, therefore, equal to d, the excess of the surplus-value created by this capital over the surplus-value assigned to it by the average rate of profit. It follows from this that the price of agricultural products may stand higher than their price of production, without reaching up to their value. It follows, furthermore, that up to a certain point a permanent increase in the price of agricultural products may take place, before their price reaches their value. It follows also that the excess in the value of agricultural products over their price of production can become a determining element of their general market price only because there is a monopoly in private ownership of land. It follows, finally, that in this case the increase in the price of the product is not the cause of the rent, but rather the rent is the cause of the increase in the price of the product. If the price of the product of the unit of the worst soil is equal to P + r, then all differential rents will rise by the corresponding multiples of r, since the assumption is that P + r becomes the regulating market price.

If the average composition of the non-agricultural capital were 85 c + 15 v, and the rate of surplus-value 100%, then the price of production would be 115. If the composition of the agricultural capital were 75 c + 25 v, and the rate of surplus-value the same, then the value of the agricultural product and the regulating market price would be 125. If the agricultural and the non-agricultural product should be

leveled to the same average price (we assume for the sake of brevity that the total capital in both lines of production is equal), then the total surplus-value would be 40, or 20%, upon the 200 of capital. The product of the one as of the other would be sold at 120. In the equalization into the prices of production the average market prices of the non-agricultural capital would stand above, and those of the agricultural capital below their value. If the agricultural products were sold at their full value, they would stand higher by 5, and the industrial products lower by 5, than they do in the equalization. If the market conditions do not permit the sale of the agricultural products at their full value, at the full surplus above the price of production, then the result hangs between the two extremes; the industrial products would be sold a little above their value, and the agricultural products a little above their price of production.

Although the private ownership of land may drive the price of the products of the soil above their price of production, it does not depend upon this ownership, but upon the general condition of the market, to what extent the market price shall exceed the price of production and approach the value, and to what extent the surplus-value created in agriculture over and above the given average profit shall either be converted into rent or enter into the general equalization of the surplus-value to an average profit. At any rate this absolute rent, which arises out of the excess of value over the price of production, is but a portion of the agricultural surplus-value, a conversion of this surplus-value into rent, its appropriation by the landlord; so does the differential rent arise out of the conversion of surplus-profit into rent, its appropriation by the landlord, under an average price of production which acts as a regulator. These two forms of rent are the only normal ones. Outside of them the rent can rest only upon an actual monopoly price, which is determined neither by the price of production nor by the value of commodities, but by the needs and the solvency of the buyers. Its analysis belongs in the theory of competition, where the actual movement of market-prices is considered.

If all the land suitable for agriculture in a certain country were leased — assuming the capitalist mode of production and normal conditions to be general — then there would not be any soil that would not pay any rent; but there might be certain parts of some capitals invested in land that might not produce any rent. For as soon as the land has been rented, private property in land ceases to be an absolute barrier against the investment of the necessary capital. Still it continues to act as a relative barrier even after that, to the extent that the appropriation of the capital incorporated in the soil by the landlord draws very definite lines for the activity of the tenant. Only in this case would all rent be converted into a differential rent, although this would not be a differential rent determined by any differences in the fertility of the soil, but rather by differences between the surplus profits arising from the last investments of capital in a certain soil and the rent paid for the lease of the soil of the worst quality. Private property in land serves as an absolute barrier to the investment of capital only to the extent that it exacts a tribute for the permission of giving access to the land. As soon as this access has been gained, it can no longer set any absolute obstacles in the way of the size of any investment of capital in a certain soil. The building of houses meets a barrier in the private ownership of the land upon which the houses are to be built by people who do not own this land. But after this land has once been leased for the purpose of building houses on it, it depends upon the tenant whether he wants to build a large or a small house.

If the average composition of the agricultural capital were the same, or higher than that of social average capital, then absolute rent, in the sense in which we use this term, would disappear; that is, absolute rent which is different from differential rent as well as from the rent which rests upon an actual monopoly price. The value of agricultural capital would not stand above its price of production, in that case, and the agricultural capital would not set any more labor in motion, would not realize any more surplus labor, than the non-agricultural capital. The same would take place, if the

composition of the agricultural capital would gradually become the same as that of the average social capital with the progress of civilization.

It looks at first glance like a contradiction, that we should assume that on the one hand the composition of the agricultural capital should become higher, in other words that its constant portion should increase faster than its variable one, and on the other hand that the price of the agricultural product should rise high enough to admit of the payment of a rent on the part of worse soil than that cultivated previously, a rent which in this case could come only from an excess of the market price over the value and the price of production, in short, a rent which could be due only to a monopoly price of the product.

It is necessary to make a clear distinction here.

In the first place, we saw in the discussion of the way, in which the rate of profit is formed, that capitals, which have the same composition, so far as their technological side is concerned, so that they set the same amount of labor in motion compared to machinery and raw materials, may nevertheless have different compositions owing to the different values of the constant portions of capital. The raw materials or the machinery may be dearer in one capital than in the other. In order to set the same quantity of labor in motion (and this would have to be the case, according to our assumption, in order that the same mass of raw materials might be worked up), a larger capital would have to be advanced in the one case than in the other, since I cannot set the same amount of labor in motion, if the raw material, which must be paid out of 100, costs 40 in one case and 20 in another. But it would become evident that these two capitals have the same technological composition, as soon as the price of the expensive raw material would fall to the level of the cheap. The proportions of value between constant and variable capital would become the same in that case, although no change would have taken place in the technical proportions between the living labor and the mass and nature of the material requirements of production employed by this capital. On the other hand,

a capital of low organic composition might assume the appearance of being in the same class with one of a higher organic composition, as soon as the value of its constant parts would rise through changes in the composition of its values. For instance, one capital might be composed of 60 c + 40 v, because it employs much machinery and raw material compared to living labor, and another capital might be composed of 40 c + 60 v, because it employs 60% of living labor, 10% of machinery, and 30% of raw material. In this case a simple rise in the value of raw and auxiliary materials from 30 to 80 would wipe out the difference in composition, for then the second capital would be composed of 10 machinery, 80 raw materials, and 60 labor-power, or of 90 c + 60 v, which, in percentages, would also be equal to 60 c + 40 v, although no change would have taken place in the technical composition. In other words, capitals of the same organic composition may have a different value-composition, and capitals with the same percentages of value-composition may be at different levels of organic composition and thus express different steps in the development of labor's social productivity. The mere circumstance, then, that the agricultural capital might stand upon the general level, would not prove that the social productivity of labor is equally high-developed in it. Nothing would be shown thereby but that its own product, which itself forms one of the conditions of its own production, had become dearer, or that auxiliary materials, such as manure, which used to be close at hand, must now be brought from far distant places, etc.

But aside from this, the peculiar character of agriculture must be taken into consideration.

Even though labor saving machinery, chemical helps, etc., may occupy more space in agriculture, so that the constant capital increases not merely in value, but also in mass, as compared to the mass of the employed labor-power, the question in agriculture (as in mining) is not only one of the social, but also of the natural productivity of labor which depends upon natural conditions. It is possible that the increase of the social productivity in agriculture barely balances

or does not even make up for, the decrease in natural power — and compensation through social productivity will always be effective for a short time only — so that in spite of the technical development there is no cheapening of the product, and that at best a greater increase in its price is prevented. It is also possible that the absolute mass of products decreases with a rising price of cereals, while the relative surplus product increases. This could take place, if the constant capital, consisting chiefly of machinery or animals, which require only a reproduction of their wear and tear, would increase relatively, and if the variable capital invested in wages, which must always be reproduced in full out of the product, should decrease correspondingly.

On the other hand it is possible, that only a moderate rise of the market price above the average is necessary, in order to cultivate and draw a rent from soil, which would have required a greater rise of the market prices so long as the technical helps were less developed.

The fact that, say in cattle raising on a large scale, the mass of the employed labor-power is very small compared with the constant capital represented by the cattle, might be considered as a refutation of the claim that the percentage of labor-power set in motion by agricultural capital is larger than that employed by the average social capital outside of agriculture. But it should be noted here that we have taken for our basis in the analysis of rent that portion of the agricultural capital, which produces the principal vegetable food, which is the chief means of subsistence among civilized nations. Adam Smith — and this is one of his merits — has already demonstrated that quite a different method of determining prices is observed in cattle raising, and for that matter generally in the production of agricultural capitals not engaged in raising the principal means of subsistence, say of cereals. For in this case the price of cattle is determined by the fact that the price of the product of the soil used for cattle raising, say as an artificial pasture, but which might just as well be transformed into cereal fields of a certain quality, must rise high enough to produce the same rent as cereal

land of the same quality. In other words, the rent of cereal lands becomes a determining element in the price of cattle. For this reason Ramsay has justly remarked that the price of cattle is artificially raised by the rent, by the economic expression of private ownership of land, in short by the private ownership of land.

Adam Smith says in Book I, Chapter XI, Part I, of his *Wealth of Nations,* that in consequence of the extension of cultivation the uncultivated fallow land no longer suffices to supply the demand for cattle. A large portion of the cultivated lands must be used for breeding and fattening cattle, the price of which must be high enough to pay not merely for the labor spent upon them, but also for the rent which the landlord and the profit which the tenant might have drawn out of this land, had it been cultivated as a field. The cattle raised upon the least tilled peat bogs are sold according to their weight and quality in the same market and at the same price as those raised upon the best cultivated land. The owners of peat bogs profit thereby and raise the rent of their lands in proportion to the prices of cattle.

In this case, likewise, Smith represents the differential rent in favor of the worst soil as distinguished from grain rent.

The absolute rent explains some phenomena, which seem to make a mere monopoly price responsible for the rent, at first sight. Take, for instance, the owner of some forest, which exists without any human assistance, say in Norway. This will do to make a connection with Adam Smith's example. If this owner of the forest receives a rent from some capitalist, who has timber cut, perhaps on account of some demand from England, or if this owner has the timber cut in his own capacity as a capitalist, then a greater or smaller rent will accrue to him in the timber, aside from the profit on the invested capital. This looks like a pure increment from monopoly in the case of this product of nature. But as a matter of fact the capital consists here almost exclusively of variable elements invested in labor-power, and therefore it sets more surplus labor in motion than another capital of the

same size. The value of the timber contains a greater surplus of unpaid labor, or of surplus-value, than that of a product of some capital of higher organic composition. For this reason the average profit can be drawn from this timber, and a considerable surplus in the form of rent can fall into the hands of the owner of the forest. On the other hand it may be assumed that, owing to the ease with which the felling of timber as a line of production may be extended, the demand must rise very considerably, in order that the price of timber should equal its value, so that the entire surplus of unpaid labor (over and above that portion which falls into the capitalist's hands as an average profit) may accrue to the landlord in the form of rent.

We have assumed that the newly cultivated soil is of a still lesser quality than the worst previously cultivated one. If it is better, it pays a differential rent. But here we are analyzing precisely that case, in which the rent does not appear as a differential rent. There are only two cases possible under these circumstances. Either the newly cultivated soil is inferior to the previously cultivated soil, or it is just as good. If it is inferior, then we have already analyzed the question. Nothing remains for us to analyze but the case in which it is just as good.

We have already stated in our analysis of differential rent, that the progress of cultivation may just as well take equally good, or even better soil under new treatment as worse soil.

First. In differential rent (or any rent, generally speaking, since even in the case of differential rent the question comes up, whether on the one hand the fertility of the soil in general, and on the other hand its location, admit of its cultivation at the regulating market price in such a way as to produce a profit and a rent) two conditions work in different directions, now paralyzing each other, now alternately exerting the determining influence. The rise of the market price — provided that the cost price of cultivation has not fallen, in other words, provided that no technical progress becomes a new impetus to further cultivation — may bring more fertile soil under cultivation, which was formerly ex-

cluded from competition by its location. Or it may, in the case of inferior soil, enhance the advantage of location to such an extent, that its lesser fertility is balanced thereby. Or, without any rise in the market price, the location may carry better soils into competition through the improvement of means of communication, as we have seen on a large scale in the prairie states of North America. The same takes place also in the older civilized countries, continually if not to the same extent as in the colonies, in which, as Wakefield correctly states, the location determines the case. To sum up, then, the contradictory effects of location and fertility, and the variableness of the factor of location, which is continually balanced and passes perpetually through progressive changes tending towards a balance, carry alternately better or worse classes of soil into new competition with the older ones under cultivation.

Second. With the development of natural history and agronomics the fertility of the soil is also changed, by changing the means through which the elements of the soil may be rendered immediately serviceable. In this way light kinds of soil in France and in the eastern counties of England, which were considered inferior at one time, have recently risen to first place. (See Passy.) On the other hand soil, which was considered inferior, not for the reason that its chemical composition was bad, but that it placed certain mechanical and physical obstacles in the way of cultivation, is turned into good land, as soon as the means for overcoming such obstacles have been discovered.

Third. In all old civilized countries old historical and traditional conditions, for instance in the form of government lands, community lands, etc., have accidentally withdrawn large tracts of land from cultivation, and these come back into it very gradually. The succession, in which they are taken under cultivation, depends neither upon their good quality nor upon their location, but upon wholly external circumstances. In following up the history of English communal lands, as they were successively turned into private property through the Enclosure Bills and cultivated, nothing

would be more ridiculous than the phantastic assumption, that a modern agricultural chemist like Liebig had indicated the selection of land in this succession, had designated certain fields for cultivation on account of their chemical peculiarities and excluded others. What decided the point in this case was the opportunity which tempted the thieves, it was the more or less plausible pretenses offered by the great landlords to excuse their appropriation of such lands.

Fourth. Aside from the fact that the stage of development reached at any time by the increased population and capital sets a certain barrier to the extension of cultivation, even though it be an elastic barrier, and aside from the effects of accidents, which temporarily influence the market price, such as a series of good or bad seasons, the extension of agriculture over a larger area depends upon the entire condition of the market in capitals and upon the business condition of the whole country. In periods of stringency it will not be enough that uncultivated soil may produce the average profit for the tenant — no matter whether he pays any rent or not — in order that additional capital be invested in agriculture. On the other hand, in periods with a plethora of capital it will flow into agriculture, even without any rise in market prices, so long as only the other normal conditions are present. Better soil than that hitherto cultivated would be excluded from competition for the sole reason that its location would be unfavorable, or that it would present insurmountable obstacles to its employment for the time being, or that it was kept out by accident. For this reason we must occupy ourselves with soils which are just as good as those last cultivated. Now there is always the difference in the cost of clearing for cultivation between the new soil and the last cultivated one. And it depends upon the stand of market prices and of credit whether new land is cleared or not. As soon as this soil actually enters into competition, the market price falls once more to its former level, assuming other conditions to be equal, and the new soil will then produce the same rent as the corresponding soil formerly cultivated as the last. The theory that it does not produce any

rent is proved by its champions by assuming what they are precisely called upon to prove, namely that the soil which used to be the last did not pay any rent. One might prove in the same way that the houses which were built last do not produce any rent except the house rent proper, although they are leased. In fact, however, they do produce a rent even before they yield any house rent, for they often stand vacant for a long time. Just as successive investments of capital in a certain piece of land may bring a proportional surplus and thereby the same rent as the first investment, so fields of the same quality as those last cultivated may bring the same yield at the same cost. Otherwise it would be altogether inexplicable, how fields of the same quality could ever be taken successively under cultivation, and not all of them at the same time, or rather not a single one of them in order to avoid their coming into competition at all. The landlord is always ready to draw a rent, in other words, to receive something for nothing. But capital requires certain conditions before it can comply with this wish of the landlord. The competition of the lands among themselves does not, therefore, depend upon the wish of the landlord that they should, but upon the opportunities offered to capital for competition with other capitals upon the new fields.

To the extent that the agricultural rent proper is purely a monopoly price, such a price can only be small, just as the absolute rent can only be small under normal conditions, whatever may be the surplus of the product's value over its price of production. The nature of absolute rent, therefore, consists in this: Equally large capitals in different spheres of production produce, according to their different average composition, so long as the rate of surplus-value, or the degree of labor exploitation, is the same, different amounts of surplus-value. In industry these different masses of surplus-value are leveled into an average profit and distributed among the individual capitals uniformly and as aliquot parts of the social capital. Private property in land prevents such an equalization among capitals invested in the soil, whenever production requires real estate, either for agriculture or for

the extraction of raw materials, and catches a portion of the surplus value which would otherwise assist in the formation of the average rate of profits. The rent, then, forms a portion of the value, or more specifically of the surplus-value, of commodities and instead of falling into the hands of the capitalists, who extract it from their laborers, it is captured by the landlords, who extract it from the capitalists. The assumption is in this case that the agricultural capital sets more labor in motion than an equally large portion of the non-agricultural capital. How far the difference goes, or whether it exists at all, depends upon the relative development of agriculture as compared to industry. In the nature of the case this difference must decrease with the progress of agriculture, unless the proportion, in which the variable capital decreases as compared to the constant, is still greater in the industrial than in the agricultural capital.

This absolute rent plays an even more important role in the extractive industry, properly so-called, where one element of constant capital, the raw material, is wholly missing, and where, with the exception of those lines, in which the capital consisting of machinery and other fixed capital is very considerable, by far the lowest composition of capital exists. Precisely here, where the rent seems wholly due to a monopoly price, extraordinarily favorable market conditions are necessary in order that commodities may be sold at their value, or that rent may become equal to the entire excess of surplus-value in a commodity over its price of production. This applies, for instance, to rent in fishing waters, stone quarries, naturally grown forests, etc.[130]

CHAPTER XLVI.

BUILDING LOT RENT. MINING RENT. PRICE OF LAND.

Differential rent appears every time and follows the same laws as the agricultural differential rent, wherever rent ex-

[130] Ricardo passes over this very superficially. See his remarks against Adam Smith on Forest rent in Norway, in *Principles,* chapter II, in the beginning.

ists at all. Wherever natural forces can be monopolized and thereby guarantee a surplus profit to the industrial capitalist using these forces, whether it be waterfalls, or rich mines, or waters teeming with fish, or a favorably located building lot, there the person who by his or her title to a portion of the globe has been privileged to own these things will capture a part of the surplus profit of the active capital by means of rent. Concerning mining lands, Adam Smith has explained that the basis of their rent, like that of all land not employed in agriculture, is regulated by the agricultural rent (Book I, Chapter, XI, 2 and 3). This form of rent is distinguished, first, by the overwhelming influence exerted by location upon differential rent (an influence which is very considerable in vineyards and in building lots of large cities); secondly, by the palpable passiveness of the owner, whose sole activity consists (especially in mines) in exploiting the progress of social development, toward which he contributes nothing and for which he risks nothing, unlike the industrial capitalist; and finally by the preponderance of the monopoly price in many cases, particularly by the most shameless exploitation of poverty (poverty is for house rent a more lucrative source than the mines of Potosi ever were for Spain [131] and by the tremendous power wielded by private property in land when united with industrial capital in the same hand and used for the purpose of practically excluding the laborers in their struggle for wages from the earth as a place of domicile.[132] One section of society thus exacts from another a tribute for the permission of inhabiting the earth. Private property in land implies the privilege of the landlord to exploit the body of the globe, the bowels of the earth, the air, and with them the conservation and development of life. Not only the increase of population, and with it the growing demand for shelter, but also the development of fixed capital, which is either incorporated in the soil or takes root in it and is based upon it, such as all industrial buildings, railroads, warehouses, factory buildings, docks, etc., necessarily increase the building

[131] Laing, Newman

[132] Crowlington Strike. Engels, *The Condition of the Working Class In England*, page 256, Swan Sonnenschein edition.

rent. A mistake between the house rent, to the extent that it is an interest and mortgage upon the capital invested in a house, and the rent for the mere land is not possible in this case, even with all the good will of a Carey, particularly when the landlord and the building speculator are different persons, as they are in England. Two elements should be considered here: On the one hand, the exploitation of the earth for the purpose of reproduction or extraction, on the other hand the space required as an element of all production and all human activity. Private property in land demands its tribute in both directions. The demand for building lots raises the value of the land as a building ground and foundation, and the simultaneous demand for elements of the terrestrial globe serving as building material grows with it.[133]

That it is the ground-rent, and not the house, which forms the actual object of building speculation in rapidly growing cities, especially when building is carried on as an industry, as it is in London, we have already shown in Volume II, Chapter XII, pages 266–267, of the present work, where we quoted from the testimony of a large London building speculator, Edward Capps, given before the Select Committee on Bank Acts. The same man said on that occasion, No. 5435: I believe that a man who wants to get on in the world can hardly expect to get along by sticking to a fair trade. . . . He must of necessity build also on speculation, and that on a large scale; for the contractor makes very little profit out of the buildings themselves, he makes his principal profits out of the rise of ground-rents. He takes up, for instance, a piece of land and pays 300 pounds sterling annually for it. If he erects the right class of houses upon it after a careful building plan, he may succeed in making 400 or 500 pounds sterling out of it, and his profit would consist much more of the increased ground-rent of 100 or 150 pounds sterling annually than of the profit from the buildings, which in many cases he does not consider at all.

And it should not be forgotten that after the lapse of the

[133] The paving of the London streets has enabled the proprietors of some naked rocks on the Scotch coast to draw a rent out of formerly absolutely useless stone soil. Adam Smith, Book I, Chapter XI, 2.

lease, at the end of 99 years, as a rule, the land with all the buildings upon it and with the ground-rent, generally increased to twice or thrice its original amount, reverts from the building speculator or from his legal successor to the original landlord who was the last to rent it.

The mining rent, in its strict meaning, is determined in the same way as the agricultural rent.

There are some mines, the product of which barely suffices to pay for the labor and to reproduce the capital invested in it together with the ordinary profit. They yield some profit to the contractor, but no rent to the landlord. They can be worked to advantage only by the landowner, who in his capacity of a contractor makes the ordinary profit out of his invested capital. Many coal mines in Scotland are operated in this way, and cannot be operated in any other way. The landowner does not permit anybody to work them without the payment of rent, but no one can pay any rent for them. (Adam Smith, Book I, Chapter XI, 2.)

It is necessary to distinguish, whether the rent flows from a monopoly price, because a monopoly price of the product or of the soil exists independently of it, or whether the products are sold at a monopoly price, because a rent exists. When we speak of a monopoly price, we mean in a general way a price which is determined only by the eagerness of the purchasers to buy and by their solvency, independently of the price which is determined by the general price of production and by the value of the products. A vineyard producing wine of very extraordinary quality, a wine which can be produced only in a relatively small quantity, carries a monopoly price. The winegrower would realize a considerable surplus profit from this monopoly price, the excess of which over the value of the product would be wholly determined by the wealth and the fine appetite of the rich wine drinkers. This surplus profit, which flows from a monopoly price, is converted into rent and in this form falls into the hands of the landlord, thanks to his title to this piece of the globe, which is endowed with peculiar properties. Here, then, the monopoly price

creates the rent. On the other hand, the rent would create a monopoly price, if grain were sold not merely above its price of production, but also above its value, owing to the barrier erected by the private ownership of the land against the investment of capital upon uncultivated soil without the payment of rent. That it is only the title of a number of persons to the possession of the globe which enables them to appropriate a portion of the surplus labor of society to themselves, and to do so to an increasing extent with the development of production, is concealed by the fact that the capitalized rent, this capitalized tribute, appears as the price of the land, and that the land may be sold like any other article of commerce. The buyer, therefore, does not feel that his title to the rent is obtained gratis, and without the labor, the risk, and the spirit of enterprise of the capitalist, but rather that he has paid for it with an equivalent. To the buyer, as we have previously remarked, the rent appears merely as interest on the capital, with which he has bought the land and consequently his title to the rent. In the same way, the slaveholder considers a negro, whom he has bought, his property, not because slavery as such entitles him to that negro, but because he has acquired him just as he does any other commodity, by means of sale and purchase, but the title itself is only transferred, not created by sale. The title must exist, before it can be sold, and a series of sales cannot create this title by repetition any more than one single sale can. It was created in the first place by the conditions of production. As soon as these have arrived at a point, where they must shed their skin, the material source of the title, justified economically and historically and arising from the process which creates the material requirements of life, falls to the ground, and with it all transactions based upon it. From the point of view of a higher economic form of society, the private ownership of the globe on the part of some individuals will appear quite as absurd as the private ownership of one man by another. Even a whole society, a nation, or even all societies together, are not the *owners* of the globe. They are

only its *possessors,* its users, and they have to hand it down to the coming generations in an improved condition, like good fathers of families.

In the following analysis of the price of land we leave out of consideration all fluctuations of competition, all land speculation, and small landed property, in which the land is the principal instrument of the producers and must, therefore, be bought by them at any price.

I. The price of land may rise, although the rent may not rise with it. This may take place,

1) by a mere fall of the rate of interest, which may cause the rent to be sold more dearly, so that the capitalized rent, the price of land rises;

2) because the interest of the capital incorporated in the land rises.

II. The price of land may rise, because the rent increases.

The rent may increase, because the price of the product of the land rises, in which case the rate of differential rent always rises, whether the rent upon the worst cultivated soil be large, small or nonexistent. But by the rate we mean the ratio of that portion of surplus-value, which is converted into rent, to the invested capital, which produces the product of the soil. This differs from the ratio of the surplus product to the total product, for the total product does not comprise the entire invested capital, namely not the fixed capital, which continues to exist by the side of the product. But it includes the fact that upon the soils carrying a differential rent an increasing portion of the product is converted into an overplus of a surplus product. Upon the worst soil the increase in the price of the product of the soil first creates a rent and consequently a price of land.

But the rent may also increase without a rise in the price of the product of the soil. This price may remain unaltered, or may even decrease.

If the price remains constant, the rent can grow only (aside from monopoly prices) because, on the one hand, the same

amount of capital remains invested in the older lands, while new lands of a better quality are cultivated, which, however, suffice only to cover the increased demand, so that the regulating market price remains unchanged. In this case the price of the old lands does not rise, but the price of the newly cultivated lands rises above that of the older lands.

Or, on the other hand, the rent rises because the mass of the capital exploiting the land increases, while the relative productivity and the market price remain the same. Although the rent remains the same in this case, compared to the invested capital, still its mass, for instance, may be doubled, because the capital itself has doubled. Since no fall in the price has occurred, the second investment of capital yields a surplus profit as well as the first, and it likewise is converted into rent after the expiration of the lease. The mass of the rent rises here, because the mass of capital producing a rent increases. The contention that different investments of capital in succession upon the same piece of land can produce a rent only to the extent that their yield is unequal, so that a differential rent arises, amounts to the contention that when two capitals of 1,000 pounds sterling each are invested upon fields of equal productivity, only one of them can produce a rent, although these fields belong to the better class of soil, which produces a differential rent. (The mass of the rental, the total rent of a certain country, grows therefore with the mass of capital invested, although the price of the individual pieces of land, or the rate of rent, or the mass of rent upon the individual pieces of land, does not necessarily increase; the mass of the rental grows in this case with the extension of cultivation over a wider area. This may even be combined with a fall of the rent upon the individual holdings.) On the other hand, this contention would lead to another, to the effect that the investment of capital upon two different pieces of land side by side follows different laws than the successive investment of capital upon the same piece of land, whereas differential rent is precisely derived from the identity of the law in both cases, that is, from the increased productivity of investments of capital either upon the same field or upon different fields. The

only modification which exists here and is overlooked is that successive investments of capital, when invested upon different pieces of land, meet the barrier of private ownership of land, which is not the case with successive investments of capital upon the same piece of land. This accounts for the opposite effects, by which these two forms of investments keep each other in check in practice. Whatever difference appears here is not due to capital. If the composition of the capital remains the same, and with it the rate of surplus-value, then the rate of profit remains unaltered, so that the mass of profits is doubled when the capital is doubled. In like manner the rate of rent remains the same under the conditions assumed by us. If a capital of 1,000 pounds sterling produces a rent of x, then a capital of 2,000 pounds sterling, under the assumed conditions, produces a rent of 2 x. But calculated with reference to the area of land, which has remained unaltered, since the doubled capital works upon the same field, according to our assumption, the level of the rent has risen together with its mass. The same acre, which brought a rent of 2 pounds sterling, now brings 4 pounds sterling.[134]

The relation of a portion of the surplus-value, of money rent — for money is the independent expression of value — to the land is in itself absurd and irrational. For the magnitudes, which are here measured by one another, are incommensurable, a certain use-value, a piece of land of so and so many square feet on the one hand, and of so much value, especially surplus-value, on the other. This expresses in fact

[134] It is one of the merits of Rodbertus whose important work on rent we shall discuss in volume IV (*"Theories of Surplus-Value,"* volume II, Part I), to have enlarged upon this point. He commits the mistake, however, to assume, in the first place, that in the case of capital the increase in profits is always expressed by an increase of capital, so that the ratio remains the same, when the mass of the profits increase. But this is an error, since the rate of profit may increase when the composition of the capital is changed, even if the exploitation of labor remains the same, just because the proportional value of the constant portion of capital, compared to its variable portion, may fall. In the second place he commits the mistake of dealing with the ratio of the money rent to a quantitatively limited piece of land, for instance to an acre, as though it had been the general assumption of classic economics in its analysis of the rise or fall of rent. This, again, is wrong. Classic economics always treats the rate of rent, so far as it considers rent in its natural form, with reference to the product, and so far as it considers rent as money rent, with reference to the advanced capital, because these are in fact its rational expressions.

nothing else but that, under the existing conditions, the ownership of so and so many square feet of land enables the landowner to catch a certain quantity of unpaid labor, which capital wallowing in square feet like a hog in potatoes has realized [The manuscript here has in brackets, but crossed out, the name "Liebig."] But on first sight the expression is the same as though some one were to speak of the relation of a five-pound note to the diameter of the earth. However, the reconciliation of the irrational forms, in which certain economic conditions appear and assert themselves in practice, does not concern the active agents of these relations in their every day life. And as they are accustomed to moving about in them, they do not find anything strange about them. A complete contradiction has not the least mystery for them, They are as much at home among the manifestations which, separated from their internal connections and isolated by themselves, seem absurd, as a fish in the water. The same thing that Hegel says with reference to certain mathematical formulæ applies here. The thing which seems irrational to ordinary common sense is rational, and what seems rational to it is irrational.

When considered in connection with the land area itself, a rise in the mass of the rent expresses itself in the same way that a rise in the rate of the rent does, and this accounts for the embarrassment caused to some thinkers when the conditions, which would explain the one case, are absent in the other.

Finally, the price of land may also rise, even when the price of the products of the soil decreases.

In this case, the differential rent and with it the price of land of the better classes may have risen, owing to further differentiations. Or, if this should not be the case, the price of the products of the soil may have fallen through a greater productivity of labor, but in such a way that the increased productivity more than balances this. Let us assume that one quarter cost 60 shillings. Now, if the same acre, with the same capital, should produce two quarters instead of one, and the price of one quarter should fall to 40 shillings, then two

quarters would cost 80 shillings, so that the value of the product of the same capital upon the same acre would have risen by one-third, although the price per quarter would have fallen by one-third. How this is possible without selling the product above its price of production or above its value, has been shown in the analysis of differential rent. As a matter of fact it is possible only in two ways. Either some bad soil is placed outside of competition, but the price of the better soil increases with the increase of differential rent, owing to the fact that the general improvement affects the various kinds of soil differently. Or, the same price of production (and the same value, in case absolute rent should be paid) expresses itself upon the worst soil through a larger mass of products, when the productivity of labor has become greater. The product represents the same value as before, but the price of its aliquot parts has fallen, while their number has increased. This is impossible, when the same capital has been employed; for in this case the same value always expresses itself through any portion of the product. It is possible, on the other hand, when additional capital has been used for gypsum, guano, etc., in short for improvements which extend their effects over several years. The premise is that the price of the individual quarter falls, but not to the same extent that the number of quarters increases.

III. These different conditions under which rent may rise and with it the price of land in general, or of particular kinds of land, may partly exist side by side and compete, or the one may exclude the other, so that they act alternately. But it follows from the foregoing that it will not do to conclude offhand that a rise in the price of land signifies also a rise of rent, or that a rise of rent, which always carries with it a rise in the price of land, also signifies a rise in the price of the products of the land.[135]

Instead of tracing to their source the natural causes which lead to an exhaustion of the soil, and which, by the way, were

[135] Concerning a fall in the price of land as a fact when the rent rises, see Passy.

unknown to all economists who have written anything on differential rent, owing to the condition of agricultural chemistry in their day, the shallow conception has been advanced, that any amount of capital cannot be invested in a limited space of land. For instance, the "*Westminister Review*" maintained against Richard Jones, that all England could not be fed by cultivating Soho Square. If this is considered a special disadvantage of agriculture, it is precisely the opposite which is true. It is possible to invest capital successively with good results, because the soil itself serves as a means of production, which is not the case with a factory, or is true of it only to a limited extent, since there the land serves only as a basis, as a space, as a foundation for operations upon a certain area. It is true that, compared to scattered handicrafts, great industries may concentrate large productive plants in a small space. But even so, a definite space is always required at any stage of development, and the building of high structures has its practical limits. Beyond these limits any expansion of production demands also an extension of the land area. The fixed capital invested in machinery, etc., does not improve through use, but on the contrary, it wears out. New inventions may, indeed permit some improvement in this respect, but with any given development of the productive power the machine will always deteriorate. If the productive power is rapidly developed, the entire old machinery must be replaced by a better one, so that the old is lost. But the soil, if properly treated, improves all the time. The advantage of the soil is that successive investments of capital may bring gains without losing the older ones, and this implies the possibility of differences in the yields of these successive investments of capital.

CHAPTER XLVII.

GENESIS OF CAPITALIST GROUND-RENT.

I. *Introductory Remarks.*

We must be clear in our minds about the real difficulty in the analysis of ground-rent from the point of view of modern economics, to the extent that it is a theoretical expression of the capitalist mode of production. Even many of the more modern writers have not grasped this yet, as is shown by every renewed attempt to find a "new" explanation of ground-rent. The novelty consists almost always in a relapse into long outgrown conceptions. The difficulty is not to explain the surplus product and the surplus-value produced by agricultural capital. This question is solved by the general analysis of the surplus-value produced by all productive capital, no matter in what sphere it may be invested. The difficulty consists rather in demonstrating the source of the surplus over and above the general surplus-value paid by capital invested in the soil to the landlord in the form of rent after the general surplus-value has been distributed among the various capitals by means of the average profit, in other words, after the various capitals have shared in the total surplus-value produced by the social capital in all spheres of production in proportion to their relative size. Quite aside from the practical motives, which urged the modern economists as spokesmen of the industrial capitalists against the landlords to investigate this question, motives which we shall indicate more clearly in the chapter on the history of ground-rent, the question was of paramount interest for them as a theory. To admit that the rising of rent for capital invested in agriculture was due to some particular effect of the sphere of investment, to peculiar qualities of the land itself, was equivalent to giving up the conception of value as such,

equivalent to abandoning all attempts at a scientific understanding of this field. Merely the simple observation that the rent is paid out of the price of the products of the soil, a thing which takes place even where rent is paid in kind, provided that the tenant is to get his price of production out of the land, showed the absurdity of the attempt to explain the excess of this price over the ordinary price of production, in other words, to explain the relative dearness of the products of agriculture out of the excess of the natural productivity of agricultural industry over the productivity of the other lines of industry. For the reverse is true. The more productive labor is, the cheaper is every aliquot part of its product, because the mass of use-values is so much greater, in which the same quantity of labor and with it the same value is incorporated.

The entire difficulty in the analysis of rent, therefore, consists in the explanation of the excess of agricultural profit over the average profit. It is not a question of surplus-value as such, but of the peculiar surplus of surplus-value found in this sphere of production, not a question of the "net product," but of the excess of this net product over the net product of the other lines of industry. The average profit itself is a product, formed under very definite historical conditions of production by the movement of the process of social life, a product which requires very far-reaching interrelations, as we have seen. In order that we may be able to speak at all of a surplus over the average profit, this average profit itself must already exist as a standard and as a regulator of production, such as it is under capitalist production. For this reason there can be no such thing as a rent in the modern sense, a rent consisting of a surplus over the average profit, over and above the proportional share of each individual capital in the total surplus-value produced by the entire social capital, so long as capital does not perform the function of enforcing all surplus-labor and appropriating at first hand all surplus-value, so long as capital has not yet brought under its control the social labor, or has done so only sporadically. It shows the naiveté of a man like Passy (see further along) that he

speaks of a rent, a surplus over the profit, in primitive society, a surplus over and above a historically defined form of surplus-value, which, according to Passy, might almost exist without any society.

For the older economists, who make the first beginning in an analysis of the capitalist mode of production, which was still undeveloped in their day, the analysis of rent either offers no difficulty, or a difficulty of another sort. Petty, Cantillon, and in general the writers who are closer to feudal times, assume that ground-rent is the normal form of surplus-value, whereas profit to them is still vaguely combined with wages, or at best looks to them like a portion of surplus-value filched by the capitalist from the landlord. These writers take their departure from a condition, in which the agricultural population still constitutes the overwhelming majority of the nation, and in which the landlord still appears as the individual, who appropriates at first hand the surplus labor of the direct producers through his land monopoly, in which land therefore still appears as the chief requisite of production. These writers could not yet face the question, which, contrary to them, seeks to investigate from the point of view of capitalist production, how it happens that private ownership in land manages to wrest from capital a portion of the surplus-value produced by it at first hand (that is, filched by it from the direct producers) and first appropriated by it.

The physiocrats are troubled by a difficulty of another kind. Being in fact the first systematic spokesman of capital, they try to analyze the nature of surplus-value in general. This analysis coincides for them with the analysis of rent, the only form of surplus-value that exists for them. Therefore the rent-paying, or agricultural capital, is to them the only capital which produces any surplus-value, and the agricultural labor set in motion by it the only labor which makes for surplus-value, which quite correctly is considered the only productive labor from a capitalist point of view. They are right in considering the production of surplus-value as the essential thing. Aside from other merits set forth by us in

the volume dealing with "*Theories of Surplus-Value,*" they have the great merit of going back from the merchants' capital, which performs its functions wholly in the sphere of circulation, to the productive capital. In this they are opposed to the mercantile system, which, with its crude realism, constitutes the dominating vulgar economy of that time pushing the beginnings of scientific analysis by Petty and his successors into the background by means of its practical interests. By the way, in this critique of the mercantile system we aim only at its conceptions of capital and surplus-value. We have already indicated previously that the monetary system correctly proclaims production for the world market and the transformation of the product into commodities, and thus into money, as the prerequisite and condition of capitalist production. In the further development of this system into the mercantile system, it is no longer the transformation of the value of commodities into money, but the production of surplus-value, which decides the point, but merely from the meaningless point of view of the sphere of circulation and with the understanding that this surplus-value must present itself as surplus money in the surplus of the balance of trade. The characteristic mark of the interested merchants and manufacturers of that time, which is adequate to the period of capitalist development represented by them, is found in the fact that their principal aim in the transformation of the feudal and agricultural societies into industrial ones and in the corresponding industrial struggle of the nations upon the world market is a hastened development of capital, which is not supposed to take place in the so-called natural way, but by means of forced measures. It makes a tremendous difference, whether the national capital is gradually and slowly transformed into industrial capital, or whether the time of this development is hastened by means of a tax which they impose through protective duties mainly upon the real estate owners, the middle class and small farmers, and the handicraftsmen, by the accelerated expropriation of the independent direct producers, by a violently hastened accumulation and concentration of capitals, in short

by a hastened introduction of the conditions of capitalist production. It makes at the same time an enormous difference in the capitalist and industrial exploitation of the natural powers of national production. Hence the national character of the mercantile system is not a mere phrase in the mouths of its spokesmen. Under the pretense of occupying themselves merely with the wealth of the nation and the resources of the state, they practically proclaim the interests of the capitalist class and the gathering of riches to be the ultimate end of the state, and so they proclaim bourgeois society against the old supernatural state. But at the same time they are conscious of the fact that the development of the interests of capital and of the capitalist class, of capitalist production, is the foundation of the national power and of the national preponderance in modern society.

The physiocrats are, furthermore, correct in stating that the production of surplus-value, and with it all development of capital, has for its natural basis the productivity of agricultural labor. If human beings are not capable of producing by one day's labor more means of subsistence, which signifies in its strictest sense more products of agriculture, than every laborer needs for his own reproduction, if the daily expenditure of his entire labor-power suffices only to produce the means of subsistence indispensable for his own individual needs, then there can be no mention of any surplus product nor of any surplus-value. A productivity of agricultural labor exceeding the individual requirements of the laborer is the basis of all societies, and is above all the basis of capitalist production, which separates a continually increasing portion of society from the production of the immediate requirements of life and transforms them into "free heads," as Steuart has it, making them available for exploitation in other spheres.

But what are we to say of more recent writers on economics, such as Daire, Passy, etc., who repeat the most primitive conceptions concerning the natural requirements of surplus labor and surplus-value in general, at a time when classic economy is in its declining years, or even on its deathbed,

and who imagine that they are thus saying something new and convincing on ground-rent, after this ground-rent has long developed a peculiar form and has become a specific part of surplus-value?

It is precisely characteristic of vulgar economy that it repeats things which were new, original, deep and justified during a certain outgrown stage of development, at a time when they have become platitudinous, stale, false. In this way it confesses that it has not the slightest suspicion of the problems which used to occupy the attention of classic economy. It confounds them with questions that could be posed only on a low level in the development of bourgeois society. It is the same with its restless and self-complacent rumination of the physiocratic phrases concerning free trade. These phrases have long lost all theoretical interest, no matter how much they may engage the practical attention of this or that modern state.

In natural economy, properly so-called, when no part of the agricultural product, or but a very insignificant part of it, enters into the process of circulation, or even but a relatively small portion of that part of the product which represents the revenue of the landlord, as it did in many Roman latifundiæ, or upon the villae of Charlemagne, or more or less during the entire Middle Ages (see Vincard, *Histoire du Travail*), the product and the surplus product of the large estates consists by no means purely of the products of agricultural labor. Domestic handicrafts and manufacturing labor, as side issues to agriculture, which forms the basis, is the prerequisite of that mode of production upon which natural economy rests, in European antiquity and Middle Ages as well as in the Indian commune of the present day, in which the traditional organization has not yet been destroyed. The capitalist mode of production completely dissolves this connection. This process may be studied on a large scale during the last third of the 18th century, in England. Brains that had grown up in more or less semi-feudal societies, for instance Herrenschwand, still consider this separation of manufacture from agriculture as a foolhardy social

adventure, as an unthinkably risky mode of existence, even as late as the close of the 18th century. And even in the agricultural societies of antiquity, which show the greatest analogy to capitalist agriculture, namely Carthage and Rome, the similiarity with plantation management is greater than with that form which really corresponds to the capitalist mode of exploitation.[136]

There existed at one time a formal analogy, which, however, appears as a deception in all essential points to a man familiar with the capitalist mode of production, and who does not, like Mr. Mommsen,[137] discover a capitalist mode of production in every monetary economy. This formal analogy did not exist at all in continental Italy during antiquity, but at best only in Sicily, because this island served as an agricultural tributary for Rome, so that its agriculture was chiefly aimed at export. It was there that tenants of the modern kind existed.

An incorrect conception of the nature of rent is based upon the fact that rent in a natural form, either as tithes to the church, or as a curiosity perpetuated by old contracts, has dragged itself into modern times out of the natural economy of feudal days, quite contrary to the conditions of the capitalist mode of production. This creates the impression that rent does not arise from the price of the agricultural product, but from its mass, not from social conditions, but from the soil. We have shown previously that a surplus product, representing a mere increase in the mass of products, does not constitute any surplus-value, although surplus-value represents itself in a surplus product. A surplus product may represent a minus in value. Otherwise the cotton industry of

[136] Adam Smith emphasizes the fact that at his time (and this applies also to the plantations in tropical and subtropical countries in our own time) rent and profit were not yet separated, for the landlord was at the same time a capitalist, just as Cato, for instance, was upon his estates. But this separation is precisely the premise of the capitalist mode of production. Moreover, the basis of slavery stands in contradiction with the nature of capitalist production.

[137] Mr. Mommsen, in his Roman history, does not use the term capitalist in the sense in which modern economics and modern society does, but rather in the way peculiar to popular conception, such as still continues to vegetate, not in England or America, but upon the European continent, as an ancient tradition of past conditions.

1860, compared to that of 1840, would represent an enormous surplus-value, whereas on the contrary the price of the yarn has fallen. The rent may increase enormously through a succession of crop failures, because the price of cereals rises, although this surplus-value is represented by an absolutely decreasing mass of dearer wheat. Vice versa, the rent may fall through a succession of fertile years, because the price falls, although the fallen rent is represented by a greater mass of cheaper wheat.

With regard to rent in kind it should be noted that it is a mere tradition dragged over from an outgrown mode of production and eking out an existence as a ruin. Its contradiction to the capitalist mode of production is shown by the fact that it disappeared from private contracts of its own accord, and that it was shaken off by force as an inconsistency in such instances as the church tithes in England, where legislation was able to step in. Furthermore, where rent in kind continued to exist on the basis of capitalist production, it was nothing else, and could be nothing else, but an expression of money rent in medieval garb. For instance, wheat is quoted at 40 shillings per quarter. One portion of this wheat has to reproduce the wages contained in it, and must be sold in order to be available for renewed expenditure. Another portion must be sold in order to pay its share of the taxes. Seeds and even a part of the manure enter as commodities into the process of reproduction, wherever the capitalist mode of production and division of labor are developed, and they must be bought for the purposes of reproduction. Therefore another portion of this quarter must be sold, in order to get money for these things. To the extent that they do not have to be bought as actual commodities, but are taken in their natural form out of the product, in order to enter once more as means of production into its reproduction — which is done, not only in agriculture, but in many other lines of production which create constant capital — they figure in the accounts as money of account and are thus deducted as component parts of the cost-price. The wear and tear of machinery, and of fixed capital in general, must be

made good in money. And finally comes the profit, which is calculated on the basis of this sum of costs expressed either in real or in accounting money. This profit is represented by a definite portion of the gross product, which is determined by its price. The portion which then remains is the rent. If the rent in kind stipulated by contract is greater than this remainder determined by the price, then it is not a rent, but a deduction from the profit. On account of this possibility alone rent in kind is an old form, to the extent that it does not follow the price of the product, but may amount to more or less than the real rent, so that it may not only contain a deduction from the profit, but also from elements required for the reproduction of the capital. In fact, this rent in kind, so far as it is a rent, not merely in name but in essence, is exclusively determined by the excess of the price of the product over its cost of production. Only it assumes this variable magnitude to be a constant one. But it is such a comforting reflection that the natural product should suffice, in the first place, to maintain the laborer, in the second place, to leave for the capitalist tenant more food than he needs, and finally, that the remainder should form a natural rent. The same fancy is indulged in when a manufacturer of cotton goods produces 200,000 yards of them. These yards are supposed to suffice for the purpose of clothing his laborers, his wife and all his offspring, together with himself abundantly, to leave over some cotton for sale, and besides to pay an enormous rent with cotton goods. The matter is so simple! Deduct the cost of production from 200,000 yards of cotton goods, and a surplus must remain for rent. But it is indeed a naïve conception, to deduct the cost of production of, say, 10,000 pounds sterling from 200,000 yards of cotton, without knowing the selling price, to deduct money from cotton goods, to deduct from a natural use-value an exchange-value, and thus to determine the surplus of yards of cotton goods over pounds of sterling. It is worse than the squaring of the circle, which is at least based upon the conception that there is a boundary at which straight lines and curves flow imperceptibly into each other. But such is the

recipe of Mr. Passy. Deduct money from cotton goods, before the cotton goods have been converted into money, either in your head or in reality! What remains is the rent, which, however, is to be grasped tangibly (see for instance, Karl Arnd) and not by deviltries of sophistry. The entire restoration of rent in kind amounts really to this foolishness, to this deduction of the price of production from so and so many bushels of wheat, the subtraction of a sum of money from a cubic measure.

II. *Labor Rent.*

If we observe ground-rent in its simplest form, that of labor rent, which means that the direct producer cultivates during a part of the week, with instruments of labor (plow, cattle, etc.), actually or legally belonging to him, the soil owned by him in fact, and works during the remaining days upon the estate of the feudal lord, without any compensation from the feudal lord, the proposition is quite clear, for in this case rent and surplus-value are identical. The rent, not the profit, is here the form through which the unpaid surplus labor expresses itself. To what extent the laborer, the self-sustaining serf, can here secure for himself a surplus above his indispensable necessities of life, a surplus above the thing which we would call wages under the capitalist mode of production, depends, other circumstances remaining unchanged, upon the proportion, in which his labor time is divided into labor time for himself and forced labor time for his feudal lord. This surplus above the indispensable requirements of life, the germ of that which appears as profit under the capitalist mode of production, is therefore wholly determined by the size of the ground-rent, which in this case not only is unpaid surplus labor, but also appears as such. It is unpaid surplus labor for the "owner" of the means of production, which here coincide with the land, and so far as they differ from it, are mere accessories to it. That the product of the laboring serf must suffice to reproduce both his subsistence and his requirements of production, is a fact which remains

the same under all modes of production. For it is not a result of its specific form, but a natural requisite of all continuous and reproductive labor, of any continued production, which is always a reproduction, including the reproduction of its own labor conditions. It is furthermore evident that in all forms, in which the direct laborer remains the "possessor" of the means of production and labor conditions of his own means of subsistence, the property relation must at the same time assert itself as a direct relation between rulers and servants, so that the direct producer is not free. This is a lack of freedom which may be modified from serfdom with forced labor to the point of a mere tributary relation. The direct producer, according to our assumption, is here in possession of his own means of production, of the material labor conditions required for the realization of his labor and the production of his means of subsistence. He carries on his agriculture and the rural house industries connected with it as an independent producer. This independence is not abolished by the fact that these small farmers may form among themselves a more or less natural commune in production, as they do in India, since it is here merely a question of independence from the nominal lord of the soil. Under such conditions the surplus labor for the nominal owner of the land cannot be filched from them by any economic measures, but must be forced from them by other measures, whatever may be the form assumed by them.[138]

This is different from slave or plantation economy, in that the slave works with conditions of labor belonging to another. He does not work as an independent producer. This requires conditions of personal dependence, a lack of personal freedom, no matter to what extent, a bondage to the soil as its accessory, a serfdom in the strict meaning of the word. If the direct producers are not under the sovereignty of a private landlord, but rather under that of a state which stands over them as their direct landlord and sovereign, then rent and taxes coincide, or rather, there is no tax which differs

[138] After a country had been conquered, the next step for the conquerer was always to take possession of the human beings also. Compare Linguet. See also Möser.

from this form of ground-rent. Under these circumstances the subject need not be politically or economically under any harder pressure than that common to all subjection to that state. The state is then the supreme landlord. The sovereignty consists here in the ownership of land concentrated on a national scale. But, on the other hand, no private ownership of land exists, although there is both private and common possession and use of land.

The specific economic form, in which unpaid surplus labor is pumped out of the direct producers, determines the relation of rulers and ruled, as it grows immediately out of production itself and reacts upon it as a determining element. Upon this is founded the entire formation of the economic community which grows up out of the conditions of production itself, and this also determines its specific political shape. It is always the direct relation of the owners of the conditions of production to the direct producers, which reveals the innermost secret, the hidden foundation of the entire social construction, and with it of the political form of the relations between sovereignty and dependence, in short, of the corresponding form of the state. The form of this relation between rulers and ruled naturally corresponds always with a definite stage in the development of the methods of labor and of its productive social power. This does not prevent the same economic basis from showing infinite variations and gradations in its appearance, even though its principal conditions are everywhere the same. This is due to innumerable outside circumstances, natural environment, race peculiarities, outside historical influences, and so forth, all of which must be ascertained by careful analysis.

So much is evident in the case of labor rent, the simplest and most primitive form of rent: The rent is here the original form of surplus-value and coincides with it. Furthermore, the identity of surplus-value with unpaid labor of others does not need to be demonstrated by any analysis in this case, because it still exists in its visible, palpable form, for the labor of the direct producer for himself is still separated by space and time from his labor for the landlord, and this

last labor appears clearly in the brutal form of forced labor for another. In the same way the "quality" of the soil to produce a rent is here reduced to a tangibly open secret, for the nature which here furnishes the rent also includes the human labor-power bound to the soil, and the property relation which compels the owner of labor-power to exert this quality and to keep it busy beyond the measure required for the satisfaction of his own material needs. The rent consists directly in the appropriation, by the landlord, of this surplus expenditure of labor-power. For the direct producer pays no other rent. Here, where surplus-value and rent are not only identical, but where surplus-value obviously has the form of surplus labor, the natural conditions, or limits, of rent lie on the surface, because those of surplus-value do. The direct producer must, 1), possess enough labor-power, and 2), the natural conditions of his labor, which means in the first place the soil cultivated by him, must be productive enough, in one word, the natural productivity of his labor must be so great that the possibility of some surplus labor over and above that required for the satisfaction of his own needs shall remain. It is not this possibility which creates the rent. The rent is not created until compulsion makes a reality of this possibility. But the possibility itself is conditioned upon subjective and objective facts of nature. And there is nothing mysterious about it. If the labor-power is small, and the natural conditions of labor poor, then the surplus labor is small, but so are in that case the wants of the producers on one side and the relative numbers of the exploiters of surplus labor on the other, and so is finally the surplus product, by which this little productive surplus labor is represented for those few exploiting land owners.

Finally, labor rent implies in itself that, all other circumstances remaining equal, it will depend wholly upon the relative amount of surplus labor, or forced labor, to what extent the direct producer shall be enabled to improve his own condition, to acquire wealth, to produce a surplus over and above his indispensable means of subsistence, or, if we wish to anticipate the capitalist mode of expression, whether he shall be

able to produce a profit for himself, and how much of a profit, meaning a surplus over the wages produced by himself. The rent is here the normal, all absorbing, one might say legitimate, form of surplus labor. So far from being a surplus over the profit, which means in this case in excess of any other surplus over the wages, it is rather the amount of profit, and even its very existence, which depends, other circumstances being equal, upon the amount of rent, or upon the forced surplus labor to be surrendered to the landlord.

Some historians have expressed astonishment that it should be possible for the forced laborers, or serfs, to acquire any independent property, or relatively speaking, wealth, under such circumstances, since the direct producer is not an owner, but only a possessor, and since all his surplus labor belongs legally to the landlord. However, it is evident that tradition must play a very powerful role in the primitive and undeveloped circumstances, upon which this relation in social production and the corresponding mode of production are based. It is furthermore clear that here as everywhere else it is in the interest of the ruling section of society to sanction the existing order as a law and to perpetuate its habitually and traditionally fixed limits as legal ones. Aside from all other matters, this comes about of itself in proportion as the continuous reproduction of the foundation of the existing order and of the relations corresponding to it gradually assume a regulated and orderly form. And such regulation and order are themselves indispensable elements of any mode of production, provided that it is to assume social firmness and an independence from mere accident and arbitrariness. It is just through them that society is rendered more firm and emancipated relatively from mere arbitrariness and mere accident. Society assumes this form by the repeated reproduction of the same mode of production, where the process of production stagnates and with it the corresponding social relations. If this continues for some time, this order fortifies itself by custom and tradition and is finally sanctioned as an expressed law. Since the form of this surplus labor, of forced labor, rests upon the imperfect development of all pro-

ductive powers of society, and upon the crudeness of the methods of labor itself, it will naturally absorb a much smaller portion, relatively, of the total labor of the direct producers than under developed modes of production, particularly under the capitalist mode of production. Take it, for instance, that the forced labor for the landlord originally amounted to two days per week. These two days of forced labor are fixed, are a constant magnitude, legally regulated by laws of usage or written laws. But the productivity of the remaining days of the week, over which the direct producer has independent control, is a variable magnitude, which must develop in the course of his experience, together with the new wants he acquires, together with the expansion of the market for his product, together with the increasing security which guarantees independence for this portion of his labor-power. These things will spur him on to a greater exertion of his labor-power, and it must not be forgotten that the employment of his labor-power is by no means confined to agriculture, but includes rural house industry. The possibility of a certain economic development, depending, of course, upon the favor of circumstances, upon inborn race characteristics, etc., is open in this case.

III. *Rent in Kind.*

The transformation of labor rent into rent in kind does not change anything in the nature of rent, economically speaking. This nature, in the forms of rent considered here, is such that rent is the sole prevailing and normal form of surplus labor, or surplus-value. This, again, expresses the fact that rent is the only surplus labor, or the only surplus product which the direct producer, being in possession of the labor conditions needed for his own reproduction, must give up to the owner of the land, which under this state of things is the one condition of labor embracing everything. And furthermore it expresses the fact that land is the only labor condition, which stands opposed to the direct producer as a property independent of him and held in the hands of another,

being personified by the landlord. To the extent that rent in kind is the prevailing and dominant form of ground-rent, it is always more or less in the company of survivals of the preceding form, that is of rent paid directly by labor, forced labor, no matter whether the landlord be a private person or the state. Rent in kind requires a higher state of civilization for the direct producer, a higher stage of development of his labor and of society in general. And it is distinguished from the preceding form by the fact that the surplus labor is no longer performed naturally, is no longer performed under the direct supervision and compulsion of the landlord or of his representatives. The direct producer is rather driven by the force of circumstances than by direct coercion, rather by legal enactment than by the whip, to perform surplus labor on his own responsibility. Surplus production, in the sense of a production beyond the indispensable needs of the direct producer, and within the field of production actually in his own possession, upon the soil exploited by himself and no longer upon the lord's estate outside of his own land, has become a matter of fact rule here. In this relation the direct producer is more or less master of the employment of his whole labor time, although a part of this labor time, at first practically the entire surplus portion of it, belongs to the landlord without any compensation. Only, the landlord does not get this surplus labor any more in its natural form, but rather in the natural form of the product in which it is realized. The burdensome interruption by the labor for the landlord (see Volume I, chapter X, 2, *Manufacturer and Boyard*), which disturbs the reproduction of the serf more or less, according to the way in which forced labor is regulated, disappears, wherever rent in kind has its pure form, or at least it is reduced to a few short intervals during the year, which demand a continuation of rent by forced labor by the side of rent in kind. The labor of the producer for himself and his labor for the landlord are no longer palpably separated by time and space. This rent in kind, in its pure form, while it may drag itself along sporadically into more highly developed modes of production and conditions of production, nev-

ertheless requires for its existence a natural economy, that is an economy in which the conditions of production are either wholly or for the overwhelming part produced by the system itself in such a way that they are reproduced directly out of its gross product. It furthermore requires the combination of domestic rural industry with agriculture. The surplus product, which forms the rent, is the product of this combined agricultural and industrial family labor, no matter whether rent in kind contains more or less of the industrial product, as it often does in the middle ages, or whether it is paid only in the form of actual products of the soil. In this form of rent it is by no means necessary that rent in kind, which represents the surplus labor, should fully exhaust the entire surplus labor of the rural family. Compared to labor rent, the producer rather has more elbow room to gain time for some surplus labor whose product shall belong to himself, as does that of the labor which produces his indispensable means of subsistence. This form will also give rise to greater differences in the economic situation of the individual direct producers. At least the possibility for such a differentiation exists, and so does the possibility that the direct producer may have acquired the means to exploit other laborers for himself, but this does not concern us here, since we are dealing with rent in its pure form. Neither can we pay any heed to the endless variety of combinations, by which the various forms of rent may be united, adulterated and amalgamated.

Owing to the peculiar form of rent in kind, by which it is bound to a definite kind of products and of production, owing furthermore to the indispensable combination of agriculture and domestic industry attached to it, also to the almost complete selfsufficiency in which the peasant family supports itself and to its independence from markets and from the movement of production and history in the social spheres outside of it, in short owing to the character of natural economy in general this form is quite suitable for becoming the basis of stationary conditions of society, such as we see in Asia. Here, as previously in the form of labor rent, ground-rent is the normal form of surplus-value, and thus of surplus labor, that

is of the entire surplus labor performed without any equivalent by the direct producer for the benefit of the owner of his essential means of production, the land, a labor which is still performed under compulsion, although no longer in the old brutal form. The profit, if, falsely anticipating, we may so call that portion of the direct producer's labor which exceeds his necessary labor and which he keeps for himself, has so little to do with determining the rent in kind, that this profit rather grows up behind the back of the rent and finds its natural limit in the size of the rent in kind. This rent may assume dimensions which seriously threaten the reproduction of the conditions of labor, of the means of production. It may render an expansion of production more or less impossible, and grind the direct producers down to the physical minimum of means of subsistence. This is particularly the case, when this form is met and exploited by a conquering industrial nation, as India is by the English.

IV. *Money Rent.*

By money rent we mean here — for the sake of distinction from the industrial and commercial ground-rent resting upon the capitalist mode of production, which is but a surplus over the average profit — that ground-rent which arises from a mere change of form of rent in kind, just as this rent in kind, in its turn, is but a modification of labor rent. Under money rent, the direct producer no longer turns over the product, but its price, to the landlord (who may be either the state or a private individual). A surplus of products in their natural form is no longer sufficient; it must be converted from its natural form into money. Although the direct producer still continues to produce at least the greater part of his means of subsistence himself, a certain portion of this product must now be converted into commodities, must be produced as commodities. The character of the entire mode of production is thus more or less changed. It loses its independence, it remains no longer detached from the social

connections. The proportion of the cost of production, which now is more and more complicated with the expenditure of money, now becomes a determining factor. At any rate, the excess of that portion of the gross product, which must be converted into money, over that portion, which has to serve either as means of reproduction or as means of direct subsistence, assumes a determining role. However, the basis of this rent remains the same as that of the rent in kind, from which it starts, although money rent likewise approaches its dissolution. The direct producer still is the possessor of the land, either by inheritance or by some other traditional right, and he has to perform for his landlord, who is the owner of the land, of his most essential instrument of production, forced surplus labor, that is, unpaid labor for which no equivalent is returned, and this forced surplus labor is now paid in money obtained by the sale of the surplus product. The property in requirements of labor separate from the land, such as agricultural implements and other movable things, is transformed into the property of the direct producer even under the preceding form of rent, first in fact, then legally, and this is the condition even more under money rent. The transformation of rent in kind into money rent, taking place first sporadically, then on a more or less national scale, requires a considerable development of commerce, of city industries, of the production of commodities in general, and with them of the circulation of money. It furthermore requires that products should have a market price, and that they are sold more or less approximately at their values, which need not necessarily be the case under the preceding forms. In the East of Europe we may still see in a certain measure this transformation with our own eyes. How little it can be carried through without a certain development of the social productivity of labor, is proved by various unsuccessful attempts to carry it through under the Roman emperors, and by relapses into rent in kind after the attempt had been made to convert at least that portion of rent in kind into a money rent which had to be paid as a state tax. The same difficulties of transition are shown, for instance, by the

prerevolutionary time in France, when money rent was combined and adulterated by survivals of the forms preceding it.

Money rent, as a converted form of rent in kind and as an antagonist of rent in kind, is the last form, and the dissolving form, of that form of ground-rent, which we have considered so far, namely of ground-rent as the normal form of surplus-value and of the unpaid surplus labor to be performed for the owner of the means of production. In its pure form, this rent, like labor rent and rent in kind, does not represent any surplus above the profit. It absorbs the profit, as it is understood. To the extent that profit arises in fact as a separate portion of the surplus labor by the side of the rent, money rent as well as rent in its preceding forms still is the normal barrier of such embryonic profit, which can only develop in proportion as the possibility of exploitation grows, whether it be the producer's own surplus labor or the surplus labor of another, which remains after the surplus represented by money rent has been paid. If any profit actually arises along with this rent, this profit is not a barrier of rent, but the rent is rather a barrier of this profit. However, we repeat that money rent is at the same time the disappearing form of the rent which we have considered so far, of that rent which is identical with surplus-value and surplus labor, of ground-rent as the normal and prevailing form of surplus-value.

In its further development money rent must lead — aside from all intermediate forms, such as that of the small peasant who is a tenant — either to the transformation of land into independent peasants' property, or into the form corresponding to the capitalist mode of production, that is, to rent paid by the capitalist tenant.

With the coming of money rent the traditional and customary relation between the landlord and the subject tillers of the soil, who possess and cultivate a part of the land, is turned into a pure money relation fixed by the rules of positive law. The cultivating possessor thus becomes virtually a mere tenant. This transformation serves on the one hand, provided that other general conditions of production permit

such a thing, to expropriate gradually the old peasant possessors and to put in their place capitalist tenants. On the other hand it leads to a release of the old possessors from their tributary relation by buying themselves free from their landlord, so that they become independent farmers and free owners of the land tilled by them. The transformation of rent in kind into money rent is not only necessarily accompanied, but even anticipated by the formation of a class of propertyless day laborers, who hire themselves out for wages. During the period of their rise, when this new class appears but sporadically, the custom necessarily develops among the better situated tributary farmers of exploiting agricultural laborers for their own account, just as the wealthier serfs in feudal times used to employ serfs for their own benefit. In this way they gradually acquire the ability to accumulate a certain amount of wealth and to transform themselves even into future capitalists. The old selfemploying possessors of the land thus give rise among themselves to a nursery for capitalist tenants, whose development is conditioned upon the general development of capitalist production outside of the rural districts. This class grows very rapidly, when particularly favorable circumstances come to its aid, as they did in England in the 16th century, where the progressive depreciation of money made them rich, under the customary long leases, at the expense of the landlords.

Furthermore: As soon as rent assumes the form of money rent, and with it the relation between rent paying peasants and landlords becomes a relation fixed by contract — a development which is not possible unless the world market, commerce and manufacture have reached a relatively high level — the leasing of land to capitalists necessarily also puts in its appearance. These men, having stood outside of the rural barrier so far, now transfer to the country and to agriculture some capital acquired in the cities and with it the capitalist mode of production as developed in those cities, which implies the creation of the product in the form of a mere commodity and as a mere means of appropriating surplus-value. This form can become the general rule only

in those countries, which dominate the world market in the period of transition from the feudal to the capitalist mode of production. When the capitalist tenant steps between the landlord and the actually working tiller of the soil, all conditions have been dissolved, which arose from the old rural mode of production. The capitalist tenant becomes the actual commander of these agricultural laborers and the actual exploiter of their surplus labor, whereas the landlord has any direct relations only with this capitalist tenant, the relation being a mere money relation fixed by contract. This transforms also the nature of the rent, not merely in fact and accidentally, as it did sometimes even under the preceding forms, but normally, by transforming its acknowledged and prevailing mode. Instead of continuing as the normal form of surplus-value and surplus labor, it becomes a mere surplus of this surplus labor over that portion of it, which is appropriated by the exploiting capitalist in the form of profit. And now the total surplus labor, both profit and surplus above the profit, are extracted by him directly, appropriated in the form of the surplus product, and turned into money. It is only the surplus portion of the surplus-value extracted by him from the agricultural laborer by direct exploitation, by means of his capital, which he turns over to the landlord as rent. How much or how little he gives away to him depends, as a rule, upon the limits set by the average profit which is realized by the capital in the non-agricultural spheres of production, and by the non-agricultural prices of production regulated by this average profit. From a normal form of surplus-value and surplus labor the rent has now transformed itself into a surplus peculiar to the agricultural sphere of production, exceeding that portion of the surplus labor, which is claimed at first hand by capital as its legitimate and normal share. Profit, instead of rent, has now become the normal form of surplus-value, and rent exists only as a form, not of surplus-value in general, but of one of its offshoots, called surplus profit, which assumes an independent existence only under very peculiar circumstances. It is not necessary to dwell any further upon the way in which this transformation is accom-

panied by a gradual transformation of the mode of production itself. This is shown by the mere fact that it is the normal thing for the capitalist tenant to produce the products of the soil as commodities, and that, while formerly only the surplus over his means of subsistence was converted into commodities, now but a relatively small part of these commodities is directly used as means of subsistence for him. It is no longer the land, but the capital, which has now brought under its direct sway and under its own productivity the labor of the agriculturalist.

The average profit and the price of production regulated by it are formed outside of the conditions of the rural country within the circles of city commerce and manufacture. The profit of the rent-paying farmers does not enter into it as a balancing element, for their relation to the landlord is not a capitalist one. To the extent that he makes profits, that is, realizes a surplus above his necessary means of subsistence, either by his own labor or by the exploitation of other people's labor, it is done behind the back of the normal relationship. Other circumstances being equal, the size of this profit does not determine the rent, but on the contrary, it is determined by the limits set by the rent. The high rate of profit in the Middle Ages is not entirely due to the low composition of the capital, in which the variable capital, invested in wages, predominates. It is due also to the robbery committed against the land, the appropriation of a portion of the landlord's rent and of the income of his vassals. While the country exploits the town politically in the Middle Ages, wherever feudalism has not been broken down by an exceptional development of the towns, the town, on the other hand, everywhere and without exception exploits the land economically by its monopoly prices, its system of taxation, its guild organizations, its direct mercantile fraud and its usury.

One might imagine that the mere advent of the capitalist tenant in agricultural production would prove that the price of those products of the soil, which had always paid a rent in one form or another, must stand above the prices of production of manufacture, at least at the time of this advent. And

this for the reason that the price of such products of the soil had reached the level of a monopoly price or that it had risen as high as the value of the products of the soil, and that this value actually stood above the price of production regulated by the average profit. Unless this were so, the capitalist tenant could not very well realize first the average profit out of the price of these products, at the existing prices of the products of the soil, and then pay out of this same price a surplus above his profit in the form of rent. One might conclude from this that the average rate of profit, which guides the capitalist tenant in his contract with the landlord, had been formed without including the rent, and that as soon as this average rate of profit assumes a regulating part in agricultural production it finds this surplus ready at hand and turns it over to the landlord. It is in this traditional manner that, for instance, Rodbertus explains this matter.

But several points must be considered here.

1) This advent of capital as an independent and leading power in agriculture does not take place generally all at once, but gradually and separately in various lines of production. It seizes at first, not agriculture proper, but such lines of production as cattle raising, especially sheep raising, whose principal product, wool, offers a steady surplus of the market price over the price of production during the rise of industry, and this is not balanced until later. This was the case in England during the 16th century.

2) Since this capitalist production appears at first but sporadically, nothing can be argued against the assumption, that it takes hold in the beginning only of such groups of land as are able, through their particular fertility, or their exceptionally favorable location, to pay a differential rent in the long run.

3) Even assuming that at the time of the advent of this mode of production, which indeed requires an increasing preponderance of the demand in the towns, the prices of the products of the soil stood higher than the price of production, as was doubtless the case during the last third of the 17th century in England, nevertheless, as soon as this mode

of production will have worked its way somewhat out of the mere subordination of agriculture to capital, and as soon as the improvement of agriculture and the reduction of its cost of production, which accompany its development, will have taken place, the balance will be restored by a reaction, a fall in the price of the products of the soil, as happened in the first half of the 18th century in England.

In this traditional way, then, rent as a surplus above the average profit cannot be explained. Whatever may be the historical circumstances of the time in which rent appears at first, once that it has taken root it cannot exist under any other modern conditions than those previously explained.

Finally, it should be noted in the transformation of rent in kind into money rent, that with it capitalized rent, or the price of land, and its salableness and sale become essential elements, and that with them not only the formerly rent-paying tenant may be transformed into an independent peasant proprietor, but also urban and other moneyed people may buy real estate, in order to lease them either to peasants or to capitalists and thus to enjoy rent in the form of interest on capital so invested; that, therefore, this likewise assists in the transformation of the former mode of exploitation, of the relation between the owner and the actual tiller of the land, and of the rent itself.

V. *Share Farming (Métairie System) and Small Peasants' Property.*

We have now arrived at the end of our line of development of ground-rent.

In all these forms of ground-rent, whether labor rent, rent in kind, or money rent (as a mere change of form of rent in kind), the rent-paying party is always supposed to be the actual tiller and possessor of the land, whose unpaid surplus labor passes directly into the hands of the landlord. Even in the last form, money rent — to the extent that it is "pure," in other words, a mere change of form of rent in kind — this is not only possible, but actually takes place.

As a form of transition from the original form of rent to capitalist rent, we may consider the metairic system, or share farming, under which the manager (tenant) furnishes not only labor (his own or that of others), but also a portion of the first capital, and the landlord furnishes, aside from the land, another portion of the first capital (for instance cattle), and the product is divided between the tenant and the landlord according to definite shares, which differ in various countries. In this case, the tenant lacks the capital required for a thorough capitalist operation of agriculture. On the other hand, the share thus appropriated by the landlord has not the pure form of rent. It may actually include interest on the capital advanced by him and a surplus rent. It may also absorb practically all the surplus labor of the tenant, or leave to him a greater or smaller portion of this surplus labor. But the essential point is that rent no longer appears here as the normal form of surplus-value in general. On the one hand, the tenant, whether he employ his own labor or another's, is supposed to have a claim upon a portion of the product, not in his capacity as a laborer, but as a possessor of a part of the instruments of labor, as his own capitalist. On the other hand, the landlord claims his share not exclusively in his capacity as the owner of the land, but also as a lender of capital.[139]

A remainder of the old community in land, which had been preserved after the transition to independent peasant economy, for instance in Poland and Roumania, served there as a subterfuge for accomplishing a transition to the lower forms of ground-rent. A portion of the land belongs to the individual farmers and is tilled independently by them. Another portion is tilled collectively and creates a surplus product, which serves either for the payment of community expenses, or as a reserve in case of crop failures, etc. These last two parts of the surplus product, and finally the whole surplus product together with the land, upon which it has been grown, are gradually usurped by state officials and private individuals, and by this means the originally free peas-

[139] Compare Buret, Tocqueville, Sismondi.

ant proprietors, whose obligation to till this land collectively is maintained, are transformed into vassals, who are compelled to perform forced labor or pay rent in kind, while the usurpers are transformed into owners, not only of the stolen community lands, but of the lands of the peasants themselves.

We need not dwell upon actual slave economy (which likewise passes through a development from the patriarchal system, working pre-eminently for home use, to the plantation system, working for the world market) nor upon that management of estates, under which the landlords carry on agriculture for their own account, own all the instruments of production, and exploit the labor of free or unfree servants, who are paid in kind or in money. In this case, the landlord and the owner of the instruments of production, and thus the direct exploiter of the laborers counted among these instruments of production, are one and the same person. Rent and profit likewise coincide then, there being no separation of the different forms of surplus-value. The entire surplus labor of the workers, which is here represented by the surplus product, is extracted from them directly by the owner of all the instruments of production, to which the land and, under the original form of slavery, the producers themselves, belong. Where capitalist conceptions predominate, as they did upon the American plantations, this entire surplus-value is regarded as profit. In places where the capitalist mode of production does not exist, nor the conceptions corresponding to it have been transferred from capitalist countries, it appears as rent. At any rate, this form does not present any difficulties. The income of the landlord, whatever may be the name given to it, the available surplus product appropriated by him, is here the normal and predominating form, under which the entire unpaid labor is directly appropriated, and the property in land forms the basis of this appropriation.

There is, furthermore, the small peasants' property. Here the farmer is the free owner of his land, which appears as his principal instrument of production, the indispensable field of employment for his labor and his capital. No lease money

is paid under this form. Rent, therefore, does not appear as a separate form of surplus-value here, although in countries, in which capitalist industry in other lines is developed, it appears as a surplus profit by comparison with other lines of production. But it is a surplus profit which, like all the rest of the product of his labor, falls into the hands of the farmer himself.

This form of property in land requires that, as was the case under the earlier forms, the rural population should have a great preponderance over the city population, so that, while capitalist production may generally prevail, it is nevertheless but relatively little developed, concentration of capitals moves in narrow circles in the other lines of production, and dissipation of capitals predominates. Under these conditions, the greater part of the rural product will have to be consumed, as a direct means of subsistence, by the producers, the farmers themselves, and only the surplus above that will pass as commodities into the commerce with the cities. Whatever may be the manner, in which the average market price of the products of the soil is regulated in this case, the differential rent, a surplus portion of the price of commodities from the superior or more favorably located lands, must evidently exist in this case just as it does under the capitalist mode of production. This differential rent would exist, even if this form should appear under social conditions, in which no general market price has as yet been developed. It appears then in the spare surplus product. Only it flows into the pocket of the farmer, whose labor realises itself under favorable natural conditions. It is precisely under this form that the assumption is correct, as a rule, that no absolute rent exists, so that the worst soil does not pay any rent. For under this form the price of land enters as an element into the actual cost of production for the farmer, since in the course of the further development of this form the price of land may have been figured, for instance in the case of a division of an estate, at a certain money value, or, in view of the continuous change in the ownership of the whole property, or of its parts, the land may have been bought by the tiller him-

self, largely by taking up money on a mortgage. In this way the price of land, which is nothing else but a capitalized rent, is a pre-existing condition and rent seems to exist independently of any differentiation in the fertility and location of the land. Absolute rent is conditioned either upon the realized surplus of the value of the product above its price of production, or a monopoly price exceeding the value of the product. But since agriculture is carried on here largely as an agriculture for direct subsistence, so that the land is an indispensable field of employment for the labor and capital of the majority of the population, the regulating market price of the product will come up to its value only under extraordinary circumstances. But its value will, as a rule, stand higher than its price of production on account of the predominance of the element of living labor, although this excess of its value over its price of production will be in its turn limited by the low composition of the capital, even of that of the industries outside of agriculture, in countries with a predominance of small farmers' property. For the small farmer the limit of exploitation is not set by the average profit of the capital, if he is a small capitalist, nor by the necessity of making a rent, if he is a landowner. Nothing appears as an absolute limit for him, as a small capitalist, but the wages which he pays to himself, after deducting his actual costs. So long as the price of the product covers these wages, he will cultivate his land, and will do so often down to the physical minimum of his wages. As for his capacity as a landlord, the barrier of property is eliminated in his case, since it can exert its influence only against a capital (including labor) separated from it, by erecting an obstacle against its investment. It is true that interest on the price of land, which generally has to be paid to another, the holder of the mortgage, also forms a barrier. But this interest can be paid out of that portion of the surplus labor, which would form the profit under capitalist conditions. The rent anticipated in the price of land, and in the interest paid for it, cannot be anything else but a portion of the capitalized surplus la-

bor of the farmer, performed by him beyond the labor indispensable for his subsistence, without realising this surplus labor in a part of the value of commodities equal to the entire average profit, and still less in a surplus profit, which would constitute a surplus above the surplus labor realised in the average profit. The rent may be a deduction from the average profit, or even the only portion of it which is realised. In order that the small farmer may cultivate his land, or may buy land for cultivation, it is therefore not necessary, as it is under a normal capitalist production, that the market price of his products should rise high enough to allow him the average profit, and still less a surplus above this average profit fixed in the form of a rent. Therefore it is not necessary that the market price should rise, either as high as the value or as high as the price of production of his product. This is one of the causes which keeps the price of cereals lower in countries with a predominance of small farmers than in countries with a capitalist mode of production. One portion of the surplus labor of the farmers, who work under the least favorable conditions, is given to society without an equivalent and does not pass over into the regulation of the price of production or into the formation of values in general. This lower price is also a result of the poverty of the producers and by no means of the productivity of their labor.

This form of free farmers' property managing their own affairs, as the prevailing, normal, form constitutes on the one hand the economic foundation of society during the best times of classical antiquity, on the other hand it is found among modern nations as one of the forms arising from the dissolution of feudal landlordism. In this way we meet the yeomanry in England, the peasantry in Sweden, the farmers in France and Western Germany. We do not mention the colonies here, since the independent farmer there develops under different conditions.

The free ownership of the selfemploying farmer is evidently the most normal form of landed property for small scale production, that is, for a mode of production, in which

the possession of the land is a prerequisite for the ownership of the product of his own labor by the laborer, and in which the agriculturist, whether he be a free owner or a vassal, always has to produce his own means of subsistence independently, as a single laborer with his family. The ownership of the soil is as necessary for the complete development of this mode of production as the ownership of the instrument is for the free development of handicraft production. This ownership forms here the basis for the development of personal independence. It is a necessary stage of transition for the development of agriculture itself. The causes which bring about its downfall show its limitations. These causes are: Destruction of rural house industries, which form its normal supplement, as a result of the development of great industries; a gradual deterioration and exhaustion of the soil subjected to this cultivation; usurpation, on the part of the great landlords, of the community lands, which form everywhere the second supplement of small peasants' property and alone enable them to keep cattle; competition, either of plantation systems or of great agricultural enterprises carried out on a capitalist scale. Improvements of agriculture, which on the one hand bring about a fall in the prices of the products of the soil, and on the other require greater investments and more diversified material conditions of production, also contribute towards this end, as they did in England during the first half of the 18th century.

Small peasants' property excludes by its very nature the development of the social powers of production of labor, the social forms of labor, the social concentration of capitals, cattle raising on a large scale, and a progressive application of science.

Usury and a system of taxation must impoverish it everywhere. The expenditure of capital in the price of the land withdraws this capital from cultivation. An infinite dissipation of means of production and an isolation of the producers themselves go with it. Also an enormous waste of human energy. A progressive deterioration of the conditions of production and a raising of the price of means of produc-

tion is a necessary law of small peasants' property. Fertile seasons are a misfortune for this mode of production.[140]

One of the specific evils of small scale agriculture, when combined with the free ownership of the land, arises from the fact that the agriculturist invests a capital in the purchase of the land. (The same applies also to the form of transition, in which the great landlord invests capital, first, for the purpose of buying land, and secondly, for the purpose of managing it as his own tenant). Owing to the changeable nature, which the land here assumes as a mere commodity, the changes of ownership increase,[141] so that the land, from the point of view of the farmer, passes again into the calculation as a new investment of capital with every new generation, every division of estates, in other words, that it becomes land bought by him. The price of land here forms an overwhelming element of the individual false cost of production, or of the cost price of the product for the individual producer.

The price of land is nothing but the capitalized, and therefore anticipated, rent. If agriculture is carried on by capitalist methods, so that the landlord receives only the rent, and the tenant pays nothing for the land except his annual rent, then it is evident that the capital invested by the owner of the land himself in the purchase of the land constitutes an interest-bearing investment of capital for him, but that it has nothing to do with the capital invested in agriculture itself. It forms neither a part of the fixed nor of the circulating capital employed here;[142] it merely secures for the buyer a title to the annual rent, but has nothing to do with the production

[140] See the speech of the king of France in Tooke.

[141] See Mounier and Rubichon.

[142] Dr. H. Maron (*Extensive or Intensive?*) [No further information given about this pamphlet]. He starts from the false assumption of those whom he combats. He assumes that the capital invested in the purchase of land is "first capital," and engages in a controversy about first capital and running capital that is, fixed and circulating capital. His wholly amateurish conceptions of capital, which may be excused in one who is not an economist in view of the condition of German political economy, conceal from him the fact that this capital is neither first nor running capital, any more than the capital, which some one may invest at the Stock Exchange in the purchase of consols or state bonds, and which represents a personal investment of capital for him, is "invested" in any productive line of industry.

of the rent itself. For the buyer of land pays his capital out to the one who sells the land, and the seller relinquishes his ownership of the land for this consideration. This capital does not exist any more as the capital of the buyer after that. He has not got it any longer. Therefore it does not belong to the capital, which he can invest in any way in the land itself. Whether he bought the land at a high or a low price, or whether he received it for nothing, does not alter anything in the capital invested by the tenant in his establishment, and does not make any change in the rent, but merely changes the question, whether it appears to him as interest or not as interest, or as a high or a low interest.

Take, for instance, the slavery system. The price paid for a slave is nothing but the anticipated and capitalized surplus-value or profit, which is to be ground out of him. But the capital paid for the purchase of a slave does not belong to the capital, by which profit, surplus labor, is extracted from him. On the contrary. It is capital, which the slave holder gives away, it is a deduction from the capital, which he has available for actual production. It has ceased to exist for him, just as the capital invested in the purchase of land has ceased to exist for agriculture. The best proof of this is the fact, that it does not come back into existence for the slave holder or the land owner, until he sells the slave or the land once more. Then the same condition of things holds good for the buyer. The fact that he has bought the slave does not enable him to exploit the slave without further ceremony. He is not able to do so until he invests some other capital in production by means of the slave.

The same capital does not exist twice. It does not exist one time in the hands of the seller, and a second time in the hands of the buyer of the land. It passes from the hands of the buyer to those of the seller, and that settles the matter. The buyer has then no longer any capital, but in its stead he has a piece of land. The fact that the rent produced by a real investment of capital in this land is figured by the new owner of the land as interest on a capital, which he did not invest in the soil, but gave away as a purchase price for the

land, does not alter the economic nature of the factor land in the least, any more than the fact that some one may have paid 1,000 pounds sterling for 3% consols has anything to do with the capital, out of whose revenue the interest on the national debt is paid.

In fact, the money expended in the purchase of land, like that spent for the purchase of national bonds, is merely capital in itself, just as any amount of values is capital in itself on the basis of capitalist production. It is potential capital. The thing paid for the land, like that paid for national bonds or any other purchased commodity, is a sum of money. This is capital in itself, because it may be converted into capital. It depends upon the use to which the seller puts it, whether the money obtained by him really becomes capital or not. For the buyer it can never again perform the functions of capital, any more than any other money which he has finally spent. It figures in his calculations as interest-bearing capital, because he considers the income, which he receives as rent from his land or as interest on his bonds, as interest on the money, which he paid for his title to this revenue. He cannot realise it as capital unless he sells his title again. If he does, then the new buyer assumes the same relationship in which the old one was, and the money spent in this transaction cannot transform itself into actual capital by any change of hands.

In the case of small property in land the illusion, that the land itself has value and may, therefore, pass as a capital into the price of production of the product, like a machine or raw materials, fortifies itself still more. But we have seen that the rent, and with it capitalised rent, or the price of land, can pass over into the price of the products of the soil in two cases only. The first case is that, in which the value of the products of the soil stands higher than their price of production and the market conditions enable the landlord to realise this difference; this condition of values and prices of production obtains, when the composition of the agricultural capital raises the value above the price of production. This agricultural capital has nothing to do with the capital invested in the purchase of the land. The second case is that in which

a monopoly price exists. And both cases occur less under small peasants' property and small land ownership than under any other form, because production largely satisfies the producers' own wants in their case and is carried on independently of the regulation by the average rate of profit. Even where small peasants' economy is carried on upon leased land, the lease money comprises more than under any other conditions a portion of the profit and even a deduction from the wages; this money is then only a nominal rent, not a rent representing an independent category as compared to wages and profit.

The expenditure of money-capital for the purchase of land, then, is not an investment of agricultural capital. It is a proportionate deduction from the capital, which the small farmers can employ in their own sphere of production. It reduces to that extent the size of their means of production and thereby narrows the economic basis of their reproduction. It subjects the small farmer to the money lender's extortion, since credit, in the strict meaning of the term, occurs but rarely in this sphere. It is an obstacle to agriculture, even where such a purchase takes place in the case of large estates. In fact, it contradicts the capitalist mode of production, which is on the whole indifferent to the question whether the landowner is in debt, no matter whether he inherited or bought his estate. The management of the leased estate itself is not altered in its nature, whether the landowner pockets the rent himself or whether he has to pay it over to the holder of his mortgage.

We have seen that the price of land is regulated by the rate of interest, if the ground-rent is a given magnitude. If the rate of interest is low, then the price of land is high, and vice versa. Normally, then, a high price of land and a low rate of interest would have to go hand in hand, so that if the farmer paid a high price for the land in consequence of a low rate of interest, the same low rate of interest should also secure for him his running capital on easy terms of credit. But in reality, things turn out differently under small peasants' property, as the prevailing form. In the first place, the

general laws of credit do not apply to the farmer, since these laws rest upon the capitalist as a producer. In the second place, where small peasants' property predominates — we are not speaking of colonies here — and the small peasant forms the foundation of the nation, the formation of capital, that is social reproduction, is relatively weak, and the formation of loanable money-capital, in the sense in which we have previously analyzed this term, is still weaker. For this is conditioned upon concentration and the existence of a class of rich and idle capitalists (Massie). In the third place, where the ownership of the land is a necessary condition for the existence of the greater part of the producers, as it is here, and an indispensable field of investment for their capital, the price of land is raised independently of the rate of interest, and often in an inverse ratio to it, by the preponderance of the demand for land over its supply. If sold in small lots, the land in this case brings a far higher price than it does by its sale in large estates, because the number of small buyers is large and that of the large buyers small (*Bandes Noires, Rubichon;* Newman). For all these reasons the price of land rises here while the rate of interest is relatively high. The relatively low interest, which the farmer here derives from the capital invested in the purchase of land (Mounier), corresponds on the other hand to the high rate of interest exacted by usury, which he himself has to pay to his mortgage creditors. The Irish system shows the same thing, only in another form.

This price of land, an element foreign in itself to production, may here rise to such a point that it makes production impossible (Dombasle).

The fact that the price of land plays such a role, that the sale and purchase of land, the circulation of land as a commodity, develops to this degree, is a practical result of capitalist development, since a commodity is here the form generally assumed by all products and all instruments of production. On the other hand, this development takes place only wherever capitalist production develops but to a limited extent and does not bring forth all its peculiarities. For

this condition rests precisely upon the fact that agriculture is no longer, or not yet, subject to the capitalist mode of production, but rather to a mode handed down from obsolete forms of society. The disadvantages of the capitalist mode of production, which makes the producers dependent upon the money price of their products, coincide here with the disadvantages due to the imperfect development of capitalist production. The farmer becomes a merchant and an industrial without the conditions which would enable him to produce his goods as commodities.

The conflict between the price of land, as an element in the cost price of the producers, but not an element in the price of production of the product (even though the rent should pass as a determining element into the price of the products of the soil, the capitalized rent, which is advanced for 20 years or more, does not pass into their price in this way), is but one of the forms through which the antagonism between private ownership of the land and between a rational agriculture, a normal social utilization of the soil, expresses itself. But on the other hand, the private ownership of the land, and with it the expropriation of the direct producers from the land — the private property of some, which implies lack of private property on the part of others — is the basis of the capitalist mode of production.

Here, in agriculture on a small scale, the price of the land a form and result of private ownership of the land, appears as a barrier of production itself. In agriculture on a large scale, and in the case of large estates resting upon a capitalist mode of production, private ownership likewise acts as a barrier, because it limits the tenant in his investment of productive capital, which in the last analysis benefits, not him, but the landlord. In both forms the exploitation and devastation of the powers of the soil takes the place of a consciously rational treatment of the soil in its role of an eternal social property, of an indispensable condition of existence and reproduction for successive generations of human beings. And besides, this exploitation is made dependent, not upon the attained degree of social development, but upon the ac-

cidental and unequal situations of individual producers. In the case of small property this happens from lack of means and science, by which the social productivity of labor-power might be utilized. In the case of large property, it is done by the exploitation of such means for the purpose of the most rapid accumulation of wealth for the tenant and proprietor. The dependence of both of them upon the market price is instrumental in accomplishing this result.

All critique of small property resolves itself in the last resort into a critique of private ownership as a barrier and obstacle of agriculture. And so does all counter-critique of large property. In either case, we leave aside, of course, all minor considerations of politics. This barrier and this obstacle, which are set up by all private property of land against agricultural production and against a rational treatment, conservation and improvement of the soil itself, develop on both sides merely in different forms. In the controversy over these specific forms of the evil its ultimate cause is forgotten.

Small property in land is conditioned upon the premise that the overwhelming majority of the population is rural, and that not the social, but the isolated labor predominates; that, therefore, in view of such conditions, the wealth and development of reproduction, both in its material and intellectual sides, are out of the question and with them the prerequisites of a rational culture. On the other hand, large landed property reduces the agricultural population to a continually decreasing minimum, and induces on the other side a continual increase of the industrial population crowded together in large cities. In this way it creates conditions, which cause an incurable break in the interconnections of the social circulation of matter prescribed by the natural laws of life. As a result the strength of the soil is wasted, and this prodigality is carried far beyond the boundaries of a certain country by commerce (Liebig).

While small property in land creates a class of barbarians standing half way outside of society, a class suffering all the tortures and all miseries of civilized countries in addition to

the crudeness of primitive forms of society, large property in land undermines labor-power in the last region, in which its primal energy seeks refuge, and in it which stores up its strength as a reserve fund for the regeneration of the vital power of nations, the land itself. Large industry and large agriculture on an industrial scale work together. Originally distinguished by the fact, that large industry lays waste and destroys principally the labor-power, the natural power, of human beings, whereas large agriculture industrially managed destroys and wastes mainly the natural powers of the soil, both of them join hands in the further course of development, so that the industrial system weakens also the laborers of the country districts, and industry and commerce supply agriculture with the means by which the soil may be exhausted.

PART VII.

THE REVENUES AND THEIR SOURCES.

CHAPTER XLVIII.

THE TRINITARIAN FORMULA.

I.[143]

Capital—Profit (Profit of Enterprise plus Interest), Land—Ground-Rent, Labor—Wages, this is the trinitarian formula which comprises all the secrets of the social process of production.

Furthermore, since interest, as previously demonstrated, appears as the characteristic product of capital, and profit of enterprise distinguishes itself from interest by appearing as wages independent of capital, the above trinitarian formula reduces itself more specifically to the following: Capital — Interest, Land — Ground-Rent, Labor — Wages. Here profit, the specific mark characterizing the form of surplus-value belonging to the capitalist mode of production, is happily eliminated.

Now, if we look more closely at this economic trinity, we observe:

1) The alleged sources of the annually available wealth belong to widely dissimilar spheres and have not the least analogy with one another. They have about the same relation to each other as lawyer's fees, carrots, and music.

Capital, Land, Labor! But capital is not a thing. It is a

[143] The following three fragments were found in different places of the manuscript for Part VI.— F. E.

definite interrelation in social production belonging to a definite historical formation of society. This interrelation expresses itself through a certain thing and gives to this thing a specific social character. Capital is not the sum of the material and produced means of production. Capital means rather the means of production converted into capital, and means of production by themselves are no more capital than gold or silver are money in themselves. Capital signifies the means of production monopolized by a certain part of society, the products and material requirements of labor made independent of labor-power in living human beings and antagonistic to them, and personified in capital by this antagonism. Capital means not merely the products of the laborers made independent of them and turned into social powers, the products turned into rulers and buyers of their own producers, but also the social powers and the future . . . (illegible) form of labor, which antagonize the producers in the shape of qualities of their products. Here, then, we have a definite and, at first sight, very mystical, social form of one of the factors in a historically produced process of social production.

By the side of this factor we have the land, the unorganic nature as such, a crude and uncouth mass, in its whole primal wildness. Value is labor. Therefore surplus-value cannot be land. The absolute fertility of the soil accomplishes no more than that a certain quantity of labor produces a certain product conditioned upon the natural fertility of the soil. The difference in the fertility of the soil brings it about that the same quantities of labor and capital, hence the same value, express themselves in different quantities of agricultural products, so that these products have different individual values. The equalization of these individual values into market-values is responsible for the fact that the "advantages of fertile over inferior soil . . . are transferred from the cultivator or consumer to the landlord." (Ricardo, *Principles,* p. 6.)

And finally, the third party in this conspiracy is a mere ghost, "Labor," a mere abstraction, and which does not exist

when taken by itself, or, if we take . . . (illegible), the productive activity of human beings in general, by which they promote the circulation of matter between themselves and nature, divested not only of every definiteness of social form and character, but even of its mere natural existence, independent of society, lifted above all societies, being the common attribute of unsocial man as well as of man with any form of society and a general expression and assertion of life.

II.

Capital — Interest; Private Land, Private Ownership of the Earth, in modern form and corresponding to the capitalist mode of production — Rent; Wage Labor — Wages. This is supposed to be the connection between the sources of revenue. Wage Labor and Private Land, like Capital, are historically determined social forms; one a social form of labor, the other a social form of the monopolized terrestrial globe, and both forms belong to the same economic formation of society corresponding to capital.

The first remarkable thing about this formula is that Land and Labor are placed indiscriminately by the side of Capital. The one, Capital, is a definite form of an element of production belonging to a definite mode of production having a definite cast. It is an element of production combined with and represented by a definite social form. The other two, Land on the one hand and Labor on the other, are two elements of the real labor process. In their material form they are common to all modes of production, they are the material elements of all processes of production, and have nothing to do with the social form of productive processes.

Secondly. In this formula (Capital — Interest, Land — Ground-Rent, Labor — Wages of Labor), capital, land and labor respectively appear as sources of interest (instead of profit), ground-rent and wages, and these things appear as their fruits; capital, land and labor appear as the cause, interest, ground-rent and wages as the effect; and this is done

in such a way that each individual source is combined with the thing which it puts forth and produces. All three revenues, interest (instead of profit), rent, wages, are three parts of the value of the product; generally speaking they are parts of value, or, expressed in money, they are certain parts of money, certain parts of price. The formula "Capital — Interest" has indeed the least meaning of any formula of capital; still it is one of its formulæ. But how is land supposed to create value, that is, a socially defined quantity of labor, or even that particular portion of the value of its own products which forms the rent? For instance, land takes part as an agent of production, in the creation of a use-value, of a material product, of wheat. But it has nothing to do with the production of the value of wheat. To the extent that value is represented by wheat, we consider wheat merely as a definite quantity of materialized social labor, regardless of the particular substance, in which this labor is materialized, or of the particular use-value of this substance.

This is not in contradiction with the fact that, in the first place, other circumstances being equal, the cheapness or dearness of the wheat depends upon the productivity of the soil. The productivity of agricultural labor is conditioned upon natural circumstances, and the same quantity of labor is represented by many or by few products, use-values, according to the productivity of such labor. How large the quantity of labor may be, which is materialized in one bushel of wheat, depends upon the number of bushels produced by the same quantity of labor. It depends, in this case, upon the productivity of the soil, in what proportions of product value shall be materialized. But this value is given, independently of such a distribution. Value is represented by use-value; and use-value is a prerequisite for the creation of exchange-value; but it is folly to construe an antagonism by placing upon one side a use-value, like land, and upon the other side an exchange-value, and at that some particular portion of exchange-value. In the second place . . . [here the manuscript stops short].

III.

Vulgar economy really does nothing else but to interpret, in doctrinaire fashion, the ideas of persons entrapped in capitalist conditions of production and performing the function of agents in such production, to systematize and to defend these ideas. We need not wonder, then, that vulgar economy feels particularly at home in the estranged form of manifestation, in which economic conditions are absurd and complete contradictions, and that these conditions appear so much more self-explanatory to it, the more their internal connection is concealed. So long as the ordinary brain accepts these conceptions, vulgar economy is satisfied. But all science would be superfluous, if the appearance, the form, and the nature of things were wholly identical. Vulgar economy has not the slightest inkling of the fact that the trinity from which it takes its departure, namely Land — Rent, Capital — Interest, Labor — Wages of Labor (or Price of Labor), are on their very face three incompatible propositions. First we have the use-value Land, which has no value, and the exchange-value Rent. Here a social relation is conceived as a thing and proportioned to nature. Two incommensurable magnitudes are supposed to be proportional to each other. Then we have Capital — Interest. If capital is conceived as a certain sum of values independently represented by money, then it is manifestly nonsense to say that a certain value shall be valued higher than its value. It is precisely in the formula Capital — Interest that all intermediate links are eliminated, and capital is reduced to its most general formula, which for this reason is inexplicable by itself and absurd. It is also for this reason that the vulgar economist prefers the formula Capital — Interest, with its occult faculty of making a value unequal to itself, to the formula of Capital — Profit, which approaches more nearly to the actual capitalist relations. Then again, driven by the restless thought that four is not five and that 100 dollars cannot be 110 dollars, he flees from Capital as an exchange-value to the material substance of capital, to its use-value as a material requirement of labor, as machinery,

raw materials, etc. By this means he succeeds in putting into the place of the first incomprehensible relation, which makes four equal to five, a wholly incommensurable one between a use-value, a thing, upon the one hand, and a definite relation of social production, surplus-value, upon the other, as he does also in the case of private property in land. As soon as the vulgar economist has arrived at this incommensurable magnitude, everything becomes clear to him, and he no longer feels the need of thinking any further. For he has arrived at what is "rational" in bourgeois conception. Finally we have Labor — Wages of Labor, or Price of Labor. This last expression, as we have shown in Volume I, contradicts on its very face the conception of value as well as of price. Price, generally speaking, is but a definite expression of value. And "Price of Labor" is just as irrational as a yellow leogarithm. But here the vulgar economist is all the more satisfied, because it brings him to the deep understanding of the bourgeois, that he pays for labor with money, and because the fact that this formula contradicts the conception of value relieves him from all obligation to understand value.

We[144] have seen that the capitalist process of production is a historically determined form of the social process of production in general. This process is on the one hand the process by which the material requirements of life are produced, and on the other hand a process which takes place under specific historical and economic conditions of production and which produces and reproduces these conditions of production themselves, and with them the human agents of this process, their material conditions of existence and their mutual relations, that is, their particular economic form of society. For the aggregate of these relations, in which the agents of this production live with regard to nature and to themselves, and in which they produce, is precisely their society, considered from the point of view of its economic structure. Like all its predecessors, the capitalist process of

[144] Beginning of Chapter XLVIII according to the manuscript.

production takes place under definite material conditions, which are at the same time the bearers of definite social relations maintained towards one another by the individuals in the process of producing their life's requirements. These conditions and these relations are on the one hand prerequisites, on the other hand results and creations of the capitalist process of production. They are produced and reproduced by it. We have also seen that capital (the capitalist is merely capital personified and functions in the process of production as the agent of capital), in the social process of production corresponding to it, pumps a certain quantity of surplus labor out of the direct producer, or laborer. It extorts this surplus without returning an equivalent. This surplus labor always remains forced labor in essence, no matter how much it may seem to be the result of free contract. This surplus labor is represented by a surplus-value, and this surplus-value is materialized in a surplus product. It must always remain surplus labor in the sense that it is labor performed above the normal requirements of the producer. In the capitalist system as well as in the slave system, etc., it merely assumes an antagonistic form and is supplemented by the complete idleness of a portion of society. A certain quantity of surplus labor is required for the purpose of discounting accidents, and by the necessary and progressive expansion of the process of reproduction in keeping with the development of the needs and the advance of population, called accumulation from the point of view of the capitalist. It is one of the civilizing sides of capital that it enforces this surplus labor in a manner and under conditions which promote the development of the productive forces, of social conditions, and the creation of the elements for a new and higher formation better than did the preceding forms of slavery, serfdom, etc. Thus it leads on the one hand to a stage, in which the coercion and the monopolization of the social development (including its material and intellectual advantages) by a portion of society at the expense of the other portion are eliminated; on the other hand it creates the material requirements and the germ of conditions, which make

it possible to combine this surplus labor in a higher form of society with a greater reduction of the time devoted to material labor. For, according to the development of the productive power of labor, surplus labor may be large in a small total labor day, and relatively small in a large total labor day. If the necessary labor time equals three, and the surplus labor three, then the total working day is equal to six, and the rate of surplus labor 100%. If the necessary labor is equal to nine, and the surplus labor three, then the total working day is twelve and the rate of surplus labor only $33\frac{1}{3}\%$. Furthermore, it depends upon the productivity of labor, how much use-value shall be produced in a definite time, hence also in a definite surplus labor time. The actual wealth of society, and the possibility of a continual expansion of its process of reproduction, do not depend upon the duration of the surplus labor, but upon its productivity and upon the more or less fertile conditions of production, under which it is performed. In fact, the realm of freedom does not commence until the point is passed where labor under the compulsion of necessity and of external utility is required. In the very nature of things it lies beyond the sphere of material production in the strict meaning of the term. Just as the savage must wrestle with nature, in order to satisfy his wants, in order to maintain his life and reproduce it, so civilized man has to do it, and he must do it in all forms of society and under all possible modes of production. With his development the realm of natural necessity expands, because his wants increase; but at the same time the forces of production increase, by which these wants are satisfied. The freedom in this field cannot consist of anything else but of the fact that socialized man, the associated producers, regulate their interchange with nature rationally, bring it under their common control, instead of being ruled by it as by some blind power; that they accomplish their task with the least expenditure of energy and under conditions most adequate to their human nature and most worthy of it. But it always remains a realm of necessity. Beyond it begins that development of human power, which is its own end, the true realm

of freedom, which, however, can flourish only upon that realm of necessity as its basis. The shortening of the working day is its fundamental premise.

In a capitalist society, this surplus-value, or this surplus product (leaving aside accidental fluctuations in its distribution and considering only the regulating law of these fluctuations), is divided among the capitalists as a dividend in proportion to the percentage of the total social capital held by each. In this shape the surplus-value appears as the average profit, which falls to the share of the capital, an average profit, which in its turn is separated into profits of enterprise and interest, and which in this way may fall into the hands of different kinds of capitalists. This appropriation and distribution of the surplus-value, or surplus product, by the capital however, has its barrier in private ownership of land. Just as the active capitalist pumps surplus labor, and with it surplus-value and surplus products in the form of profit out of the laborer, so the landlord in his turn pumps a portion of this surplus-value, or surplus product, out of the capitalist, in the shape of rent, according to the laws previously demonstrated by us.

Hence, when speaking of profit as that portion of surplus-value, which falls to the share of capital, we mean average profit (profits of enterprise plus interest), which has already been limited by deducting the rent from the aggregate profits (identical in mass with the aggregate surplus-value). That rent has been deducted in the premise here. Profits of capital (profits of enterprise plus interest) and ground-rent are merely particular constituents of surplus-value, categories, by which surplus-value is distinguished according to whether it falls into the hands of capital or of private land. This classification does not alter its nature in any way. If added together, these parts form the sum of the social surplus-value. Capital pumps the surplus labor, which is represented by surplus-value and surplus product, directly out of the laborers. To this extent it may be regarded as the producer of surplus-value. Private Land has nothing to do with the actual process of production. Its role is confined to carrying a por-

tion of the produced surplus-value from the pockets of capital to its own. However, the landlord plays a role in the capitalist process of production, not merely by the pressure, which he exerts upon capital, nor by the fact that large property in land is a prerequisite and condition of capitalist production, seeing that it separates the laborer from the means of production, but particularly because the landlord appears as the personification of one of the most essential requirements of production.

Finally, the laborer, in his capacity as the owner and seller of his individual labor-power, receives a portion of his product under the name of wages, in which that portion of his labor is materialized, which we call necessary labor, that is, the labor required for the conservation and reproduction of his labor-power, regardless of whether the conditions of this conservation and reproduction are scanty or bountiful, favorable or unfavorable.

Whatever may be the disparity of these conditions in other respects, they all have this in common: Capital yields year after year a profit to the capitalist, land a ground-rent to the landlord, and labor-power, under normal conditions and so long as it remains a useful labor-power, a wage to the laborer. These three parts of the total value produced annually, and the corresponding parts of the annually created total product, may be annually consumed by their respective owners, without draining the source of their reproduction (leaving aside for the present any consideration of accumulation). They are like the annually consumable fruits of a perennial tree, or rather of three trees. They form the annual revenue of three classes, the capitalist, the landlord and the laborer. They are revenues distributed at large by the active capitalist in his capacity as the direct exploiter of surplus labor and employer of labor in general. In this way the capital appears to the capitalist, the land to the landlord, and the labor-power or rather the labor itself, to the laborer (since he sells labor-power only to the extent that it is actively employed, and since the price of his labor-power, as previously shown, necessarily appears as the price of his labor under the capital-

ist system) as three different sources of their respective revenues, of profit, ground-rent and wages. They are so in fact in the sense that capital is for the capitalist a perennial pumping machine of surplus labor, the land for the landlord a perennial magnet attracting a portion of the surplus-value pumped out by capital, and finally, labor the continually self-renewing condition and the ever self-renewing means of acquiring a portion of the value created by the laborer and with it a part of the social product measured by this portion of value, the necessities of life, under the title of wages. They are so, furthermore, in the sense that capital fixes a portion of the value, and thus of the product, of annual labor in the form of profit, the private land fixes another portion in the form of rent, and wage labor fixes a third portion in the form of wages, and converts them by this transformation into revenues of the capitalist, the landlord, and the laborer, without, however, creating the substance itself, which is transformed into these different categories.

Their distribution rather presupposes the existence of this substance, namely the total value of the annual product, which is nothing but materialized social labor. But this is not the form, in which the matter appears to the human agents in production, to the human bearers of the various functions in the process of production. It rather appears to them reversed. We shall point out in the further course of our analysis, why this happens. Capital, ground-rent and labor appear to those human agents in production as three different, independent sources, from which arise three different constituents of the annually produced value, and of the product, in which it exists. They fancy that not merely the different forms of this value as revenues falling to the share of particular agents in the social process of production, but this value itself arises from these sources, and with it the substance of these forms of revenue.

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. . . Differential rent is bound up with the relative fertility of the soil, in other words, with qualities, which arise from the soil as such. But in the first place, to the

extent that it rests upon the different individual values of the products of different kinds of soil, it is determined only in the manner just mentioned; in the second place, to the extent that it rests upon the regulating general market value, which differs from the individual value, it is a social law carried through by means of competition, and this law has nothing to do either with the soil or with the different degrees of its fertility.

It might seem that a rational relation was expressed at least in the term "Labor — Wages of Labor." But this is no more the case than it is in the term "Land — Ground-Rent." To the extent that labor creates value, and materializes itself in the value of commodities, it has nothing to do with the distribution of this value among the different categories. And so far as it has the specifically social character of wage labor, it does not create any value. We have already shown that wages of labor, or price of labor, is but an irrational expression for the value, or price, of labor-power; and the definite social conditions, under which this labor-power is sold, have nothing to do with labor as a general agent in production. Labor is also materialized in that portion of the value of a commodity, which forms the price of labor-power in the shape of wages; it creates this portion just as it does the other portions of the product; but it does not materialize itself in this portion to any other extent, or in any other way, than it does in the portions representing rent or profit. Besides, if we regard labor as a faculty creating value, we do not look upon its concrete form as a means of production, but upon its social relation, which differs from that of wage labor.

Even the term "Capital — Profit" is not correct here. If capital is viewed in the only relation, in which it produces surplus-value, namely in its relation to the laborer, in which it extorts surplus labor by compulsion exerted upon the wage laborer and his labor-power, then this surplus-value comprises not merely profit (profit of enterprise plus interest), but also rent, in short, the entire undivided surplus-value. Here, on the other hand, as a source of revenue, it is considered only

in relation with that portion, which falls into the hands of the capitalist. This is not the surplus-value which it extracts, all together, but only that portion, which it extracts for the capitalist. Still more is all connection lost, as soon as the formula is transformed into "Capital — Interest."

Now, having first considered the disparity of the above three sources, we must note, in the second place, that their products, their offspring, the revenues, all belong to the same sphere, namely that of value. However, this relation, not only between incommensurable magnitudes, but also between wholly unlike, mutually unrelated, and incomparable things, is accounted for by the fact that capital, like land and labor, is indeed taken only in its meaning as a material substance, that is, simply as a produced means of production, and in so doing both its relation to the laborer and its value are ignored.

In the third place, if understood in this way, the formula Capital — Interest (Profit), Land — Rent, Labor — Wages of Labor, presents a uniform and symmetrical inconsistency. In fact, when wage labor does not appear as a socially determined form of labor, but rather all labor is considered naturally as wage labor (because it appears in this light to people who are biased by capitalist conditions of production), then the particular, specific, social forms observed by the material requirements of labor (the produced means of production and the land) towards wage labor (which is in its turn a prerequisite of those conditions), easily coincide with the material existence of these requirements of labor, or with the form possessed by them generally in the actual labor process, divested of all historically determined social forms, or even of any social form. The changed form of the requirements of labor, divested of labor and facing it as an independent element, which is assumed by the produced means of production when they become capital, and by the land when it becomes monopolized land, private property, this form belonging to a definite period of history then coincides with the existence and the function of the produced means of production and of the earth, in the general process of pro-

duction. Those means of production are then capital in themselves, by nature; capital is merely an "economic name" for those means of production; and in the same way land is then naturally the earth monopolized by a certain number of landlords. Just as the products become an independent power opposed to the producer when they become capital and capitalists (for capitalists are but the personification of capital), so the land becomes personified in the landlord and likewise rises on its feet to demand, as an independent power, its share of the product created by its assistance. Thus it is not the land, which receives its due portion of its product for the reproduction and improvement of its productivity, but the landlord, who takes a share of this product and sells or wastes it. It is evident that capital is conditioned upon labor in the capacity of wage labor. But it is likewise evident that if wage labor is taken as a point of departure for labor, so that the identity of any labor with wage labor appears to be a matter of course, then capital and monopolized land must also appear as the natural form of the material requirements of production as distinguished from labor. It then appears natural for the material prerequisites of labor to be capital, and this looks like their general character necessarily arising from their function in the labor process. Capital and produced means of production thus become identical terms. In like manner land and land monopolized by private owners become identical terms. In this way the requirements of production in their assumed natural capacity of capital are considered as the source of profit, and so does the land assume the guise of the source of rent.

Labor as such, in its simple capacity as a useful productive activity, refers to the means of production, not as concerns their form due to social conditions, but rather as concerns their material substance, their capacity as material and means of labor. And they are distinguished merely as use-values, the land as an unproduced, the others as produced means of production. If, then, labor is identical with wage labor, so is the particular social form assumed by the requirements of labor in their opposition to labor identical with

their material existence. The requirements of labor are then natural capital, and the land is natural private property. The formal separation of these requirements of labor from labor, the peculiar form of their independence as compared to labor, thus becomes a necessary attribute, an inherent character, inseparable from the material conditions of production. The social character given to them in the process of capitalist production by a definite epoch of history becomes a natural character belonging to them, as it were, from time immemorial, as elements in the process of production. So it is that the respective part played by the earth as the original field of activity of labor, as the realm of natural forces, as the pre-existing armory of all objects of labor, and the other respective part played by the produced means of production (instruments, raw materials, etc.) in the general process of production, must seem to be expressed in the respective shares claimed by them as capital and private land, in other words, which are pocketed by their social representatives in the form of profit (interest) and rent, just as the laborer seems to receive in his wages that share which is due to his labor in the process of production. Rent, profit and wages thus seem to grow out of the role played by the land, the produced means of production, and the labor in the simple labor process, even when we look upon this labor process as one passing merely between man and nature, without regard to any historical determination.

It is merely the same thing in another form, when it is argued that the product, in which the labor of the wage laborer materializes itself for himself, as his income, his revenue, is just his wages, is just that portion of value (and of the social product measured by this value), which represents his wages. If wage labor is identical with any labor, then so is the wage and the product of labor, and so is the portion of value representing wages and the value created by any labor. But in this way the other portions of value, profit and rent, also become independent and separated from wages, and must seem to arise from sources of their own, which differ from that of wages and are independent of it.

They must seem to arise out of the participating elements of production, by the owners of which they are claimed, so that profit seems to come from the means of production, the material elements of capital, and rent from the earth, or nature, represented by the landlord (Roscher).

Private land, capital and wage labor are thus transformed into actual sources of revenue. It is thought that rent, profit and wages and the respective portions of the product representing these parts of value, in which they exist and for which they may be exchanged, arise from these sources directly, and that the value of the product itself arises in the last analysis from them.[145] They are not considered as sources of revenue in the sense that capital assigns to the capitalist, in the form of profit, a portion of the surplus-value extracted by him from labor, that monopoly in land attracts for the landlord another portion in the form of rent, and that labor gives to the laborer the remaining portion of value in the form of wages. They are not conceived as sources, by which one portion of value is transformed into profit, another into rent, a third into wages.

In the case of the simplest categories of the capitalist mode of production, and even of the production of commodities, in the case of commodities and money, we have already pointed out the mystifying character, which transforms the social conditions that use the material elements of wealth as bearers of production into qualities of these things themselves (commodities) and still more pronouncedly transforms the interrelations of production themselves into a thing (money). All forms of society, to the extent that they reach the stage in which commodities are produced and money circulated, take part in this perversion. But under the capitalist mode of production and in the case of capital, which forms its ruling category, its determining relationship in production, this enchanted and perverted world develops still more. If we consider capital in the actual process of production, as a

[145] Wages, profit, and rent are the three original sources of all revenue, as well as of all exchangeable value (A. Smith).— In this way the causes of material production are at the same time the sources of the existing primitive revenues. (Storch, I., p. 259.)

means of extracting surplus-value, then this relationship is still very simple. The actual connection impresses itself upon the bearers of this process, the capitalists, and they are conscious of it. The violent struggle about the limits of the working day shows this clearly. But even within this undisguised sphere, the sphere of the direct process between labor and capital, matters do not rest in this simplicity. With the development of relative surplus-value in the typical, specifically capitalist mode of production, by which the social powers of production of labor are developed, these powers of production and the social interrelations of labor in the actual labor process seem transferred from labor to capital. This endows capital with a very mystic nature, since all of labor's social powers of production appear to be due to capital, not to labor as such, and seem to sprout from the womb of capital itself. Then the process of circulation intervenes, with its changes of substance and form, to which all parts of the capital, even of agricultural capital, must submit to the extent that the specifically capitalist mode of production develops. This is a sphere, in which the conditions under which value is originally produced are pushed completely into the background. Even in the direct process of production the capitalist acts at the same time in the capacity of a producer of commodities, of a manager in the production of commodities. Hence this process of production appears to him by no means as a simple process by which surplus-value is produced. But whatever may be the surplus-value extorted by capital in the actual process of production and offered in the shape of commodities, the value and surplus-value contained in the commodities must first be realized in the process of circulation. And both the restitution of the values advanced in production and, particularly, the surplus-value contained in the commodities do not seem to be merely realized in the circulation, but actually to rise from it. This appearance of things is strengthened by two circumstances. In the first place, it is strengthened by the profit made through cheating, cunning, inside knowledge, ability and a thousand market constellations in the selling of commodities. In the second place, it

is enhanced by the circumstance that a second determining element, the time of circulation, is here added to the labor time. It is true that the time of circulation asserts itself as a negative barrier against the formation of value and surplus-value, but it has the appearance of being quite as positive a cause as labor itself and of carrying into the problem a determining element independent of labor and due to the nature of capital itself.

In Volume II we had of course, to present merely the forms created and determined by this sphere of circulation, to demonstrate the further development of the form of capital, which takes place in it. But in reality this sphere is the sphere of competition, which, considered in each individual case, is dominated by accident. In other words, the internal law, which enforces itself in these accidents and regulates them, does not become visible until large numbers of these accidents are grouped together. It remains invisible and unintelligible to the individual agents in production. Furthermore: The actual process of production, considered as the unison of the strict process of production and the process of circulation, gives rise to new formations, in which the vein of the internal connections is lost, the conditions of production become separate identities, and the component parts of value become ossified into forms independent of one another.

We have seen that the conversion of surplus-value into profit is determined as much by the process of circulation as it is by the process of production. The surplus-value, in the form of profit, is no longer referred back to that portion of capital, which is invested in labor and from which it arises, but to the total capital. The rate of profit is regulated by laws of its own, which admit, or even require, a change in it while the rate of surplus-value remains unaltered. All this obscures more and more the true nature of surplus-value and thus the actual running gear of capital. Still more is this done by the transformation of profit into average profit and of the values into prices of production, into the regulating averages of the market prices. Here a

complicated social process intervenes, the process by which the capitals are equalized, and which separates the relative average prices of the commodities from their values, as it separates also the average profits of the various spheres of production (quite aside from the individual investments of capital in each particular sphere of production) from the actual exploitation of labor by the different capitals. No longer does the average price of the commodities merely seem to differ from their value, but it actually does differ, it actually is not the same as the labor realised in them, and the average profit of some particular capital differs from the surplus-value, which this capital has extracted from the laborers employed by it. The value of the commodities appears no longer directly down to their very last boundaries, but remains visible only in the influence of the fluctuating productivity of labor upon the rise and fall of the prices of production. The profit seems to be determined only incidentally by the direct exploitation of labor, namely to the extent that this exploitation permits the capitalist to realize a profit differing from the average profit at the regulating market prices, which appear to be independent of such exploitation. The normal average profits themselves seem immanent in capital and independent of exploitation. The abnormal exploitation, or even the average exploitation under exceptionally favorable conditions, seems to determine only the deviations from the average profit, not this profit itself. The division of profit into profit of enterprise and interest (not to mention the intervention of commercial profit and financial profit founded upon the circulation and seemingly arising wholly from it and not at all from the process of production itself) completes the selfdependence of the form of surplus-value, the ossification of its form as compared to its substance. One portion of the profit, as compared to the other, separates itself wholly from the relationship of capital as such and pretends to be an offspring, not of the process by which wage labor is exploited, but of the wage labor of the capitalist himself. On the other hand, interest then seems to be independent both of the wage

labor of the laborer and of that of the capitalist, and to arise from no other source but capital itself. Capital, appearing originally, on the surface of circulation, as a capitalist fetish, as a self-expanding value, now assumes in the form of interest-bearing capital, its most estranged and peculiar shape. For this reason the formula "Capital — Interest," as the third link in "Land — Rent" and "Labor — Wages of Labor," appears much more consistent than "Capital — Profit," since in "Profit" there still remains a recollection of its origin, which is not only extinguished in "Interest," but also placed in opposition to this origin and fixed in this antagonistic form.

Capital, as an independent source of surplus-value, is finally joined by private land, which acts as a barrier against average profit and transfers a portion of the surplus-value to a class that neither does any work of its own, nor directly exploits labor, nor can find moral consolation, like interest-bearing capital, in devotional subterfuges such as the alleged risk and sacrifice of lending money to others. Since a part of the surplus-value seems here bound up directly, not with a social relation, but with a natural element, the land, the form of the mutual estrangement and ossification of the various parts of surplus-value is completed, their internal connection completely disrupted, and its source entirely buried, because the relations of production have been made selfdependent in spite of the fact that they are bound up with the different material elements of the process of production.

In Capital — Profit, or better Capital — Interest, Land — Rent, Labor — Wages of Labor, in this economic trinity expressing professedly the connection of value and of wealth in general with their sources, we have the complete mystification of the capitalist mode of production, the transformation of social conditions into things, the indiscriminate amalgamation of the material conditions of production with their historical and social forms. It is an enchanted, perverted, topsy-turvy world, in which Mister Capital and Mistress Land carry on their goblin tricks as social characters and at the same time as mere things. It is the great merit of classic

economy to have dissolved this false appearance and illusion, this self-isolation and ossification of the different social elements of wealth by themselves, this personification of things and conversion of conditions of production into entities, this religion of everyday life. It did so by reducing interest to a portion of profit, and rent to the surplus above the average profit, so that both of them meet in surplus-value. It represented the process of circulation as a mere metamorphosis of forms, and finally reduced value and surplus-value of commodities to labor in the actual process of production. Nevertheless even the best spokesmen of classic economy remained more or less the prisoners of the world of illusion which they had dissolved critically, and this could not well be otherwise from a bourgeois point of view. Consequently all of them fall more or less into inconsistencies, half-way statements, and unsolved contradictions. On the other hand, it is equally natural that the actual agents of production felt completely at home in these estranged and irrational forms of Capital — Interest, Land — Rent, Labor — Wages of Labor, for these are the forms of the illusion, in which they move about and in which they find their daily occupation. It is also quite natural that vulgar economy, which is nothing but a didactic, more or less dogmatic, translation of the ordinary conceptions of the agents of production and which arranges them in a certain intelligent order, should see in this trinity, which is devoid of all internal connection, the natural and indubitable basis of its shallow assumption of importance. This formula corresponds at the same time to the interests of the ruling classes, by proclaiming the natural necessity and eternal justification of their sources of revenue and raising them to the position of a dogma.

In our description of the way, in which the conditions of production are converted into entities and into independent things as compared to the agents of production, we do not enter into a discussion of the manner, in which the interrelations of the world market, its constellations, the movements of market prices, the periods of credit, the cycles of industry and commerce, the changes from prosperity to crises, appear

to these agents as overwhelming natural laws that rule them irresistibly and enforce their rule over them as blind necessities. We do not enter into such a discussion, because the actual movements of competition belong outside of our plan, and because we have to present only the internal organization of the capitalist mode of production, as it were, in its ideal average.

In preceding forms of society this economic mystification arises principally in the case of money and of interest-bearing capital. In the nature of the case it is out of the question where, in the first place, production is mainly for use, for the satisfaction of immediate wants, and where, in the second place, slavery or serfdom form the broad foundation of social production, as they did in antiquity and during the Middle Ages. The rule of the conditions of production over the producers in those systems is concealed by the relation between masters and servants, which appear and are visible as the direct motive powers of the process of production. In the primitive societies, in which natural communism prevails, and even in the ancient urban communes, it is this community itself which appears as the basis of production, and its reproduction appears as its ultimate purpose. Even in the medieval guild system neither capital nor labor appear untrammeled. Their relations are rather defined by the corporate rules, by the conditions connected with them, and by the conceptions of professional duties, mastership, etc., which accompany them. Only when the capitalist mode of production . . .

CHAPTER XLIX.

A CONTRIBUTION TO THE ANALYSIS OF THE PROCESS OF PRODUCTION.

For the purposes of the following analysis we may leave out of consideration the distinction between the price of produc-

tion and the value, since this distinction falls altogether to the ground, when, as is the case here, the value of the total annual product of labor is under discussion, in other words, the value of the product of the total social capital.

Profit (profit of enterprise plus interest) and rent are nothing but peculiar forms assumed by particular parts of the surplus-value of commodities. The magnitude of the surplus-value is the limit of the sum of parts, into which it may be divided. The average profit plus the rent are, therefore, equal to the surplus-value. It is possible that a part of the surplus labor contained in the commodities, and thus of the surplus-value, does not take part directly in the equalization tending toward an average rate of profit, so that a part of the value of commodities is not expressed at all in their price. But in the first place, this is balanced either by the fact that the rate of profit increases, when the commodities sold below their value form an element of the constant capital, or by the fact that profit and rent are represented by a larger product, when the commodities sold below their value pass over into that portion of the value which is consumed as revenue in the shape of articles for individual consumption. In the second place, the average movement strikes the balance. At any rate, even if a portion of the surplus-value is not expressed in the price and is lost so far as the formation of prices is concerned, the sum of average profit plus rent in their normal form can never be larger than the total surplus-value, although it may be smaller. Their normal form is conditioned upon wages corresponding to the value of labor-power. Even monopoly rent, to the extent that it is not a deduction from wages, and does not constitute a special category, must be indirectly always a part of the surplus-value. If it is not a part of the surplus price above the cost of production of the commodity itself, of which it is a constituent part, as in the case of differential rent, or a spare portion of the surplus-value of the commodity itself, of which it is a constituent part, above that portion of its own surplus-value which is measured by the average profit (as in the case of absolute rent), it is

at least a part of the surplus-value of other commodities, that is, of commodities which are exchanged for this commodity, which has a monopoly price.

The sum of average profit plus ground-rent can never be greater than the magnitude of which they are the parts and which exists before they are so partitioned. It is, therefore, immaterial for our discussion, whether the entire surplus-value of the commodities, that is, all the surplus labor materialized in the commodities, is realized in their price or not. The surplus labor is not entirely realized for the simple reason that, owing to the continual change in the amount of socially necessary labor for the production of a certain commodity, a change arising out of the continual change in the productive power of labor, one portion of the commodities is always produced under abnormal conditions and must, therefore, be sold below its individual value. At any rate, profit plus rent equal the total realized surplus-value (surplus-labor), and for the purposes of the present discussion the realized surplus-value may be assumed as equal to all surplus-value; for profit and rent are realized surplus-value, or generally speaking the surplus-value which passes into the prices of commodities, which is practically all the surplus-value forming a constituent part of this price.

On the other hand, the wages, which are the third significant form of revenue, are always equal to the variable portion of capital, which is the portion invested, not in means of production, but in the purchase of living labor-power, in the payment of laborers. (The labor paid in the expenditure of revenue is itself paid in wages, profit, or rent, and therefore does not form any portion of the value of commodities by which it is paid. Hence it is not considered in the analysis of the value of commodities and of the component parts into which it is divided.) Wages are the materialization of that portion of the total working day of the laborer, in which the value of the variable capital and thus the price of labor is reproduced. It is that portion of the value of commodities, in which the laborer reproduces the value of his own labor-power, or the price of his labor. The total working day of the laborer is

divided into two parts. One portion is that in which he performs the amount of labor necessary to reproduce the value of his own means of subsistence. It is the paid portion of his total labor, that portion which is necessary for his own maintenance and reproduction. The entire remaining portion of the working day, the entire surplus quantity of labor performed above the value of the labor realized in his wages, is surplus labor, unpaid labor, represented by the surplus-value of his entire product in commodities (and thus by a surplus quantity of commodities), surplus-value, which in its turn is divided into differently named parts, into profit (profit of enterprise plus interest) and rent.

The entire portion of the value of commodities, then, in which the total labor of the laborers added during one day, or one year, is realized, is divided into the value of wages, into profit and into rent. For this total labor is divided into necessary labor, by which the laborer creates that portion of the value of his product, with which he is himself paid, that is, his wages, and into unpaid surplus labor, by which he creates that portion of the value of the product, which represents surplus-value and which is later divided into profit and rent. Aside from this labor the laborer does not perform any labor, and he does not create any value outside of the total value of the product, which assumes the forms of wages, profit and rent. The value of the annual product, in which the new labor added by the laborer during the year is incorporated, is equal to the wages, or the value of the variable capital, plus the surplus-value, which in its turn is divided into profit and rent.

The entire portion of the value of the annual product, then, which the laborer creates in the course of the year, is expressed in the annual sum of the values of the three revenues, the values of wages, profit, and rent. Evidently, therefore, the value of the constant portion of capital is not reproduced in the value of the annually created product, for the wages are only equal to the value of the variable portion of capital advanced in production, and rent and profit are only equal to the surplus-value, the produced excess of value above the total

value of the advanced capital, which is equal to the value of the constant plus the value of the variable capital.

It is immaterial for the difficulty to be solved here that a portion of the surplus-value converted into the form of profit and rent is not consumed as revenue, but is accumulated. That portion, which is saved up as a fund for accumulation, serves for the formation of new, additional, capital, but not for the reproduction of the old capital, neither of that portion of the old capital which is invested in wages nor of that which is invested in means of production. We may, therefore, assume here for the sake of simplicity that the revenues pass wholly into individual consumption. The difficulty has a twofold aspect. On the one hand, the value of the annual product, in which these revenues, wages, profit and rent, are consumed, contains a portion of value, which is equal to the portion of value of the constant part of capital used up in it. It contains this portion of value in addition to the other portion, which resolves itself into wages and that which resolves itself into profit and rent. Its value is therefore equal to wages plus profit plus rent plus C (its constant portion of value). How can an annually produced value, which equals only wages plus profit plus rent, buy a product which has a value of wages plus profit plus rent plus C?

How can the annually produced value buy a product, which has a higher value than its own?

On the other hand, if we leave aside that portion of the constant capital which did not pass over into the product, and which, therefore, continues to exist after the annual production of commodities as it did before it; in other words, if we leave aside the employed, but not consumed fixed capital, we find that the constant portion of the advanced capital has been wholly transferred to the new product in the shape of raw and auxiliary materials, whereas a part of the instruments of labor has been wholly consumed and another part of them only partially, so that only a part of its value has been consumed in production. This entire portion of the constant capital, which has been consumed in production, must be reproduced

in its natural form. Assuming all other circumstances, particularly the productive power of labor, to remain unchanged, this portion requires for its reproduction the same amount of labor as before, that is, it must be replaced by its equivalent in value. If it is not, then reproduction itself cannot take place on the old scale. But who is going to perform this labor, and who performs it?

In the first question, to-wit, Who is going to pay for the constant portion of value, and with what? it is assumed that the value of the constant capital consumed in production reappears as a part of the value of the product. This does not contradict the assumptions of the second difficulty. For we have demonstrated already in Volume I, Chapter VII (The Labor Process and the Process of Producing Surplus-Value), that the mere addition of new labor, although it does not reproduce the old value, but creates merely an addition to it, creates only additional value, still preserves at the same time the old value in the product; that this is done, however, by labor, not to the extent that it is a labor producing value, labor in general, but in its function as a definite productive labor. Therefore no additional labor was necessary for the purpose of preserving the value of the constant portion in the product, in which the revenue, that is, the entire value created during the year, is expended. On the other hand, it requires new additional labor to replace the value and use-value of the constant capital consumed during the past year, for unless this is replaced no reproduction is possible at all.

All newly added labor is represented in the value newly created during the year, and this is divided into the three revenues, that is, into wages, profit and rent. On the one hand, then, no spare social labor remains for the reproduction of the consumed constant capital, which must partially be replaced in its natural form and its value, and partially merely in its value (for the mere wear and tear of fixed capital). On the other hand, the value annually created by labor, divided into wages, profit and rent, and to be spent in

these forms, does not suffice to pay for, or buy, the constant portion of capital, which must be contained in the annual product outside of itself.

We see, then, that the problem presented here has already been solved in the discussion of the reproduction of the total social capital, Volume II, Part III. We return to it here, in the first place, for the reason that the surplus-value had not been developed in that volume into its revenue forms, profit (profit of enterprise plus interest) and rent and, therefore, could not be treated in these forms; in the second place, because the formula of wages, profit and rent is connected with an incredible aberration of the analysis, which pervades the entire political economy since Adam Smith.

In Volume II we divided all capital into two great classes: Class I, producing means of production, and Class II, producing articles of individual consumption. The fact that certain products may serve as well for personal consumption as for means of production (a horse, cereals, etc.), does not invalidate the absolute correctness of this division in any way. It is, in fact, no hypothesis, but merely the expression of a fact.

Take the annual product of a certain country. One portion of the product, whatever may be its ability to serve as means of production, passes over into individual consumption. It is the product for which wages, profit and rent are spent. This product is the product of a definite section of the social capital. It is possible that this same capital may also produce products belonging to Class I. To the extent that it does that, it is not the portion of capital consumed in the shape of the product of Class II, a product belonging actually to individual consumption, which supplies the productively consumed products passing into Class I. This entire product II, which passes into individual consumption, and for which the revenue is spent, is the material form of the capital consumed in it plus the produced surplus. It is also the product of a capital invested in the mere production of articles of consumption. And in the same way section I of the annual product, which serves as means of reproduction

and consists of raw materials and instruments of labor, is the product of a capital invested in the mere production of means of production. By far the greater part of the products forming the constant capital exists also materially in a form, in which it cannot pass into individual consumption. To the extent that it might be so used, for instance, to the extent that a farmer might eat his seed corn, butcher his teaming cattle, etc., the economic barrier puts him into the same position in which he would be if this portion did not have a consumable form.

We have already said that we leave out of consideration, in both classes, the fixed part of the constant capital, which continues to exist so far as its material substance and value are concerned, independently of the annual product of both classes.

In Class II, consisting of products for which wages, profit and rent are spent and the revenues thus consumed, the product consists of three parts, so far as its value is concerned. One part is equal to the value of the constant portion of capital consumed in production; a second part is equal to the value of the variable capital invested in wages; finally, a third part is equal to the value of the produced surplus-value, that is, equal to profit plus rent. The first part of the product of Class II, the value of the constant portion of capital, cannot be consumed either by the capitalists of Class II, or by the laborers of this class, or by the landlords. It does not form any part of their revenues, but must be replaced in its natural form, and must be sold in order that this may be done. On the other hand, the other two parts of this product are equal to the value of the revenues created in this class, equal to wages plus profit plus rent.

In Class I the product consists of the same parts, so far as its form is concerned. But that part, which here forms revenue, wages plus profit plus rent, in short, the variable portion of capital plus the surplus-value, is not consumed here in the natural form of the products of this Class I, but in products of the Class II. The value of the revenues of Class I must, therefore, be consumed in the shape of that portion

of the products of Class II, which forms the constant capital of II, that must be reproduced. That portion of the product of Class II, which must reproduce its constant capital, is consumed in its natural form by the laborers, the capitalists and the landlords of Class I. They spend their revenues for this product of II. On the other hand, the product of I, to the extent that it represents a revenue of Class I, is productively consumed in its natural form by Class II, whose constant capital it replaces in its natural form. Finally, the consumed constant portion of the capital of Class I is replaced out of the products of this class itself, which consist of instruments of labor, raw and auxiliary materials, either by an exchange of the capitalists of I among themselves, or in such a way that a portion of these capitalists can use their own product once more as means of production.

Let us take the diagram used in Volume II, Chapter XX, II, for simple reproduction:

I. $4000\ c + 1000\ v + 1000\ s = 6000$
II. $2000\ c + 500\ v + 500\ s = 3000$, Total 9000.

According to this, the producers and landlords of II consume $500\ v + 500\ s = 1{,}000$ as revenue; 2,000 c remain to be reproduced. This is consumed by the laborers, capitalists and rent owners of I, whose income is $1{,}000\ v + 1{,}000\ s = 2{,}000$. The consumed product of II is consumed as a revenue by I, and that portion of the revenue of I, which represents an unconsumable product, is consumed as a constant capital by II. It remains to account for the 4,000 c of I. This is replaced out of the product of I itself, which is 6,000, or rather 6,000 minus 2,000, for these last 2,000 have already been converted into constant capital of II. It should be noted that these numbers have been chosen at random, and so the proportion between the value of the revenues of I and the value of the constant capital of II also appears arbitrary. But it is evident that so far as the process of reproduction is normal and takes place under otherwise unchanged circumstances, leaving aside the question of accumulation, the sum of the values of wages, profit and rent in Class I must be equal to the value of the constant portion of the capital of

Class II. Otherwise Class II will not be able to reproduce its constant capital, or Class I will not be able to convert its revenue from unconsumable into consumable articles.

The value of the annual product in commodities, just like the value of the commodities produced by some particular investment of capital, and like the value of any individual commodity, resolves itself into two parts: Part A, which replaces the value of the advanced constant capital, and Part B, which presents itself in the form of wages, profit and rent. This last part of value, B, stands in opposition to the Part A to the extent that this Part A, under otherwise equal circumstances, in the first place never assumes the form of revenue, and in the second place always flows back in the form of capital, and of constant capital at that. The other portion, B, however, carries within itself an antagonism. Profit and rent have this in common with wages that all three of them are forms of revenue. Nevertheless they differ essentially from each other in that profit and rent are surplus-value, unpaid labor, whereas wages are paid labor. That portion of the value of the product, which represents spent wages and reproduces wages, and must be reconverted into wages under the conditions assumed by us, flows back first in the shape of variable capital, as a portion of the capital that once more must be advanced for the purposes of reproduction. This portion has a double function. It exists first in the form of capital and is exchanged as such for labor-power. In the hands of the laborer it is converted into revenue, which he draws out of the sale of his labor-power, and as revenue it is spent for means of subsistence and consumed. This double process is revealed through the intervention of money circulation. The variable capital is advanced in money, paid out as wages. This is its first function as capital. It is converted into labor-power and transformed into the expression of labor-power, into labor. This is the capitalist's side of the process. In the second place, the laborers buy with this money a part of the commodities produced by them, which part is measured by this money, and is consumed by them as revenue. If we imagine the circulation

of money to be eliminated, then a part of the product of the laborer is in the hands of the capitalist in the form of existing capital. He advances this part as capital, hands it over to the laborer for new labor-power, while the laborer consumes it directly or indirectly by means of exchange for other commodities, as his revenue. That portion of the value of the product, then, which is destined in the course of reproduction to be converted into wages, into revenue for the laborers, flows back at first into the hands of the capitalist in the form of capital, more accurately of variable capital. That it should flow back in this form is an essential requirement, in order that labor as wage labor, the means of production as capital, and the process of production itself as a capitalist process may always be reproduced.

In order to avoid useless difficulties, it is necessary to distinguish the gross output and the net output from the gross income and the net income.

The gross output, or the gross product, is the total reproduced product. With the exception of the employed but not consumed portion of the fixed capital, the value of the gross output, or of the gross product, is equal to the value of the capital advanced and consumed in production, that is, the constant and variable capital plus the surplus-value, which resolves itself into profit and rent. Or, if we consider the product of the total social capital instead of that of some individual capital, the gross output is equal to the material elements forming the constant plus variable capital, plus the material elements of the surplus product, in which profit and rent are materialized.

The gross income is that portion of value and that portion of the gross product measured by it, which remains after deducting that portion of value and that portion of the total product measured by it, which replaces the constant capital advanced and consumed in production. The gross income, then, is equal to the wages (or to that portion of the product which is to become once more the income of the laborer) plus the profit plus the rent. On the other hand, the net income is the surplus-value, and thus the surplus product,

which remains after the deduction of the wages, and which, in fact, represents the surplus-value realized by capital and to be divided with the landlords, and the surplus product measured by it.

Now we have seen that the value of each individual commodity and the value of the total commodities produced by each individual capital is divided into two parts, one of which replaces only constant capital, and the other of which, although a part of it flows back as variable capital, that is, also in the form of capital, nevertheless is destined to be wholly transformed into a gross income, and to assume the form of wages, profit and rent, the sum of which makes up the gross income. We have also seen that the same is true of the value of the annual total product of a certain society. There is only this difference between the product of the individual capitalist and that of society: From the point of view of the individual capitalist the net income differs from the gross income, for this last includes the wages, whereas the first excludes them. Viewing the income of the whole society, the national income consists of wages plus profit plus rent, that is, of the gross income. But even this is an abstraction to the extent that the entire society, on the basis of capitalist production, places itself upon the capitalist standpoint and considers only the income divided into profit and rent as the net income.

On the other hand, the dream of men like Say, to the effect that the entire output, the entire gross output, resolves itself into the net income of the nation and cannot be distinguished from it, so that this distinction disappears from the national point of view, is but the necessary and ultimate expression of the absurd dogma pervading political economy since Adam Smith, that the value of commodities resolves itself in the last analysis into an income, into wages, profit and rent.[146]

[146] Ricardo makes the following very apt comment on thoughtless Say: "Of net produce and gross produce, Mr. Say speaks as follows: 'The whole value produced is the gross produce; this value, after deducting from it the cost of production, is the net produce. (Vol. II, p. 491.) There can, then, be no net produce, because the cost of production, according to Mr. Say consists of rent,

Of course, it is very easy to understand, in the case of each individual capitalist, that a portion of his product must be reconverted into capital (even aside from an expansion of reproduction, or accumulation), not only into variable capital, which is destined to become in its turn an income for the laborers, a form of revenue, but also into constant capital, which can never be converted into revenue. The simplest observation of the process of production shows this clearly. The difficulty does not begin, until the process of production is studied as a whole. The fact has to be faced that the value of the entire portion of the product, which is consumed in the form of wages, profit and rent (immaterial whether the consumption is individual or productive), resolves itself under analysis wholly into a sum of values formed by wages plus profit plus rent, that is, into the total value of the three revenues, although the value of this portion of the product quite as well as that which does not pass over into the revenues contains a portion of value, equal to C, equal to the value of the constant capital contained in it, which on its very face cannot be limited by the value of the revenue. On the one hand we have the practically irrefutable fact, on the other hand the equally undeniable theoretical contradiction. This difficulty is most easily circumvented by the assertion that the value of commodities contains another portion of value, differing only seemingly, from the one existing in the form of revenue only from the point of view of the individual capitalist. The phrase that a thing is revenue for one man and capital for another saves all further thought. But then it remains an insoluble riddle, how the old capital is to be replaced, when the value of the entire product can be consumed as revenue; and how

wages and profits. In page 508 he says: 'The value of a product, the value of productive service, the value of the cost of production, are all, then, similar values, whenever things are left to their natural course.' Take a whole from a whole and nothing remains." (Ricardo, *Principles,* Chapter XXII, p. 512, Note.) — By the way, we shall see later that Ricardo nowhere refuted the false analysis made by Smith of the price of commodities, its reduction to the sum of the values of the revenues. He does not take notice of it, and assumes it to be correct to such an extent that he "abstracts" from the constant portion of the value of commodities. He also falls back now and then into the same conception.

it is that the value of the product of each individual capital can be equal to the sum of the values of the three revenues plus C, the constant capital, whereas the sum of the values of the products of all capitals can be equal to the sum of the values of the three revenues plus zero. And the riddle must be solved by declaring that any analysis is incapable of finding out the simple elements of price, and must be satisfied with the faulty cycle and the progress into infinity. So that the thing which appears as constant capital may be resolved into wages, profit and rent, whereas the values of the commodities, in which wages, profit and rent are materialized, are determined in their turn by wages, profit and rent, and so forth to infinity.[147]

The entirely false dogma to the effect that the value of commodities resolves itself in the last analysis into wages plus profits plus rent expresses itself in the assertion that the consumer must ultimately pay for the total value of the total product, or that the money circulation between producers and consumers must ultimately be equal to the money circulation between the producers themselves (Tooke). All these assertions are as false as the axiom upon which they are founded.

The difficulties, which lead to this false and prima facie absurd analysis, are briefly the following:

1) The first difficulty is that the fundamental relationship of constant and variable capital, hence also the nature

[147] "In every society the price of every commodity finally resolves itself into some one or the other, or all of those three parts (viz. wages, profits, rent). . . . A fourth part, it may perhaps be thought, is necessary for replacing the stock of the farmer or for compensating the wear and tear of his laboring cattle, and other instruments of husbandry. But it must be considered that the price of any instrument of husbandry, such as a labouring horse, is itself made up of the same three parts: the rent of the land upon which he is reared, the labour of tending and rearing him, and the profits of the farmer, who advances both the rent of his land and the wages of his labour. Though the price of corn, therefore, may pay the price as well as the maintenance of the horse, the whole price still resolves itself either immediately or ultimately into the same three parts of rent, labour (meaning wages) and profit." (Adam Smith.) — We shall show later on, that Adam Smith himself felt the inconsistency and insufficiency of this subterfuge, for it is nothing but a subterfuge on his part to send us from Pontius to Pilate while he nowhere indicates the real investment of capital, in the case of which the price of the product resolves itself ultimately into these three parts, without any remainder and any further progression.

of surplus-value, and with them the entire basis of the capitalist mode of production, are not understood. The value of each portion of any product of capital contains a certain portion of value equal to the constant capital, another portion of value equal to the variable capital (converted into wages for the laborer), and another portion of value equal to surplus-value (which later on becomes profit and rent). How is it possible that the laborer with his wages, the capitalist with his profit, the landlord with his rent, should be able to buy commodities, each one of which contains not only one of these elements, but all three of them, and how is it possible that the sum of the values of wages, profit and rent, that is, of the three sources of revenue together, should be able to buy the commodities passing over into the total consumption of the recipients of these incomes, since these commodities contain another portion of value, namely constant capital, outside of the other portions of value? How can they buy a value of four with a value of three? [148]

We have given our analysis in Volume II, Part III.

2) The second difficulty is that the way, in which labor, by adding a new value, preserves old value in a new form without producing this old value anew, is not understood.

3) The third difficulty is that the connections of the process of reproduction are not understood, as it presents itself, not from the point of view of individual capital, but from that of the total capital. The difficulty is to explain how it

[148] Proudhon, incapable of grasping this, exposes his incapableness in the formula: The laborer cannot buy back his own product, because the interest is contained in it, which is added to the purchase price. But how does Mr. Eugene Forcade teach him to know better? "If Proudhon's objection were true, it would strike not only the profits of capital, but would annihilate the possibility of all industry. If the laborer is compelled to pay 100 for each article for which he has received only 80, if his wages can buy back only the value which he has put into it, it would be as well to say that the laborer cannot buy back anything, that wages cannot pay for anything. In fact, there is always something more than the wages of the laborer contained in the purchase price, and always more than the profits of enterprise in the selling price, for instance, the price of the raw materials, which often goes to foreign countries. . . . Proudhon forgot about the continual increase of the national capital; he forgot that this increase refers to all laborers, the enterprising industrials as well as the hand laborers." (*Revue des deux Mondes*, 1848, tome, 24, p. 99.) Here we have the optimism of bourgeois thoughtlessness in the form of wisdom corresponding to it. First Mr. Forcade believes that the laborer could not live, if he did not receive a higher value than that which

is that the product, in which wages and surplus-value, in short the entire value produced by all the labor newly added during the current year, can be converted into money, can reproduce the constant part of its value and yet at the same time resolve itself into a value confined within the limits of the revenues; and how it is that the constant capital consumed in production can be replaced by the substance and value of new capital, although the total sum of the newly added labor is realized only in wages and surplus-value, and is fully represented by the sum of the values of both. It it here where the main difficulty lies, in the analysis of reproduction and of the proportions of its various component parts, both as concerns their material substance and the proportions of their value.

4) To these difficulties is added another one, which is intensified still more as soon as the various component parts of the surplus-value appear in the form of revenues independent of each other. This is the difficulty that the fixed marks of revenue and capital are interchanged and occupy different places, so that they seem to be merely relative determinations from the point of view of the individual capitalist and to disappear as soon as the total process of production is viewed as a whole. For instance, the revenue of the laborers and capitalists of Class I, which produces constant capital, replaces the value and the substance of the constant capital of the capitalists of Class II, which produces

he produces, whereas the capitalist mode of production, on the contrary, could not exist, if he received all the value which he really produces. In the second place he correctly generalizes the difficulty, which Proudhon expressed only under a more narrow point of view. The price of the commodities contains not only more than the wages, but also more than the profit, namely the constant portion of value. According to Proudhon's reasoning then, the capitalist could not buy back the commodities with his profit. And how does Forcade solve this riddle? By means of a meaningless phrase: The increase of capital. The continual increase of capital is supposed to manifest itself, among other things, also in the fact that the analysis of the price of commodities, which is impossible for the political economist in the case of a capital of 100, becomes superfluous in the case of a capital of 10,000. What would he say of a chemist, who, on being asked: How is it that the product of the soil contains more carbon than the soil? would answer: It comes from the continual increase of the product of the soil. The well-meaning good will to discover in the bourgeois world the best of all worlds takes the place, in vulgar economy, of any necessity to cultivate love of truth and scientific methods of research.

articles of consumption. One may, therefore, get around the difficulty by means of the conception that the thing which is revenue for one is capital for another. This promotes the idea that these functions have nothing to do with the actual peculiarities of the component parts of value in the commodities. Furthermore: Commodities which are ultimately intended for the purpose of forming the substantial elements in the expenditure of revenue, in other words, articles of consumption, pass through various stages during the year, such as woolen yarn, cloth. In the one stage they form a portion of the constant capital, in the other they are consumed individually, and thus pass wholly into the revenue. One may, therefore, imagine with Adam Smith that the constant capital is but seemingly an element of the value of commodities, which disappears in the total interrelation. Furthermore, a similar exchange takes place between variable capital and revenue. The laborer buys with his wages that portion of the commodities which form his revenue. In this way he creates at the same time for the capitalist the money form of the variable capital. Finally: One portion of the products, which form constant capital, is replaced in its natural form or by means of exchange by the producers of the constant capital themselves. The consumers have nothing to do with this process. When this is overlooked the impression is created that the revenue of the consumers replaces the entire product, even the constant portion of its value.

5) Aside from the confusion created by the transformation of the values into prices of production, another confusion is due to the transformation of surplus-value into different, separate, independent forms of revenue traced back to different elements of production, into profit and rent. It is forgotten that the values of commodities are the basis, and that the division of the values of commodities into separate portions, and the further development of these portions of value into forms of revenue, their transmutation into relations of the various owners of the different agencies in production to these parts of value, their distribution among these owners according to definite categories and titles, does not

alter anything in the determination of value or in its law. Neither is the law of value changed by the fact that the equalization of profit, that is, the distribution of the total value among the various capitals, and the obstacles, which private land to some extent puts in the way of this equalization (in absolute rent), makes the regulating average prices different from the individual values of the commodities. This again affects merely the addition of the surplus-value to the different prices of commodities, but does not abolish the surplus-value itself, nor the total value of commodities in its capacity as the source of these different constituents of value.

This is the confusion, which we shall consider in our next chapter, and which is necessarily connected with the illusion that the value arises out of its own component parts. First the various component parts of value receive independent forms in the revenues, and in their capacity as revenues they are referred back to the particular substantial elements of production as their alleged sources instead of to the values of commodities, which are their real source. They are actually referred back to those sources, not as components of value, but as revenues, as components of value falling to the share of definite classes of agents in production, the laborer, the capitalist and the landlord. But one might imagine that these parts of value, instead of arising out of the distribution of the value of commodities, rather form it by their composition, and this leads to that nice and faulty circle, which makes the value of commodities arise out of the sum of the values of wages, profit, rent, and the value of wages, profit and rent, in their turn, is to be determined by the value of commodities, etc.[149]

[149] "The circulating capital invested in materials, raw products and machinery is itself composed of merchandise, the necessary price of which is formed of the same elements; so that, viewing the total merchandise in a certain country, it would mean using the same thing twice to count this portion of the circulating capital among the elements of the necessary price." (Storch, *Cours d'Economie Politique,* II, page 140.) — By these elements of circulating capital Storch means the constant capital (the fixed capital is for him merely a different form of the circulating). "It is true that the wages of the laborer, the same as that portion of the profits of enterprise which stands for wages, provided we consider them as a part of the means of subsistence, also consist of merchandise bought at current

Considering reproduction in its normal condition, only a part of the newly added labor is employed for production and thus for the reproduction of the constant capital. This is precisely the portion which replaces the constant capital used up in the production of articles of consumption, of substantial parts of the revenue. This is balanced by the fact that this constant portion does not require any additional labor on the part of Class II. Looking upon the total process of reproduction as a whole, in which this equalising exchange between Classes I and II is included, this constant capital is not a product of newly added labor, although the product of this labor could not be created without that capital. This constant capital, looking upon it from the point of view of substance, is exposed to certain accidents and dangers in the process of reproduction. (Furthermore, considering it from the point of view of value, it may be depreciated through a change in the productive power of labor; but this refers only to the individual capitalist.) Accordingly a portion of the profit, of surplus-value and of the surplus-product, in which only newly added labor is represented, so far as its value is concerned, serves as an insurance fund. In this case it does not matter, whether

prices and comprise likewise wages, interest on capital ground rent and profit of enterprise. . . . But this observation merely proves that it is impossible to resolve the necessary price into its simplest elements." (Ibidem note.) — In his *Considérations sur la nature du revenu national* (Paris, 1824). Storch realizes in his controversy with Say to what absurdity the false analysis of the value of commodities leads, when it resolves value into mere revenues. He points out the folly of such results, not from the point of view of the individual capitalist, but from that of a nation, but he does not go a step further himself in his analysis of the "prix nécessaire," saying in his "Cours" that it is impossible to resolve it into its simplest elements and tracing it back into an endless progression. "It is evident that the value of the annual product is distributed partly among capital and partly among profits, and that each one of these parts of the value of the annual product buys regularly the products needed by a nation, as much for the purpose of preserving its capital as for the purpose of renewing its consumable fund (pages 134, 135). . . . Can a self-employing peasant's family live in its barns or its stables, eat its seed and forage, clothe itself with its laboring cattle, dispense with its agricultural implements? According to the thesis of Mr. Say all these questions would have to be answered in the affirmative (pages 135, 136) . . . If it is admitted that the revenue of a nation is equal to its gross product, that is, if no capital has to be deducted from it, then it must also be admitted that a nation can spend the entire value of its annual product unproductively without impairing its future income in the least (147). The products which constitute the capital of a nation cannot be consumed." (p. 150.)

this insurance fund is managed by separate insurance companies or not. This is the only part of the revenue which is neither consumed as such nor serves necessarily as a fund for accumulation. Whether it actually serves in the accumulation, or covers merely a shortage in reproduction, depends upon accident. This is also the only portion of the surplus-value and surplus-product, and thus of surplus-labor, which would continue to exist, outside of that portion which serves for accumulation and for the expansion of the process of reproduction, even after the abolition of the capitalist system. This, of course, is conditioned upon the premise that the portion regularly consumed by the direct producers does not remain limited to its present minimum. Outside of the surplus-labor for those, who on account of age can not yet or no longer take part in production, all surplus labor for non-workers would disappear. If we transport ourselves back to the beginnings of society, we find no produced means of production, hence no constant capital, the value of which could pass into the product, and which would have to be replaced in its natural form out of the product in reproduction on the same scale, and to a degree measured by its value. But nature there supplies immediately the means of subsistence, which do not have to be produced. For this reason nature gives to the savage having but few wants the time, not to use non-existing means of production in new production, but to transform, outside of the labor required for the appropriation of naturally existing means of production, other products of nature into means of production, bows, stone knives, boats, etc. This process among savages, considered merely from the side of its substance, corresponds to the reconversion of surplus-labor into new capital. In the process of accumulation, this conversion of the product of surplus labor into capital takes place continually; and the fact that all new capital arises out of profit, rent, or other forms of revenue, that is, out of surplus labor, leads to the mistaken idea that all value of commodities arises from some revenue. On the other hand, this reconversion of profit into capital rather shows

on closer analysis, that the additional labor, which is always represented in the form of revenue, does not serve for the conservation, or reproduction, of the old capital, but for the creation of new surplus capital to the extent that it is not consumed as revenue.

The whole difficulty arises from the fact that all newly added labor, to the extent that the value created by it is not dissolved into wages, appears as profit, that is, as a value which does not cost the capitalist anything and therefore cannot make good some capital advanced by him. This value rather exists in the form of available additional wealth, or, from the point of view of the individual capitalist, in the form of his revenue. But this newly created value can just as well be consumed productively as individually, equally well as capital and as revenue. In view of its natural form, some of it must be productively consumed. It is, therefore, evident that the annually added labor creates capital as well as revenue; this becomes evident in the process of accumulation. That portion of the labor-power, which is employed in the creation of new capital (analagous to that portion of the working day of a savage employed, not for the appropriation of subsistence, but for the manufacture of tools by which to appropriate subsistence), becomes evident in the fact that the entire product of surplus labor presents itself at first in the shape of profit; this use of it has indeed nothing to do with this surplus-product itself, but refers merely to the private relation of the capitalist to the surplus-value pocketed by him. In fact, the surplus-value created by the capitalist is divided into revenue and capital, that is, into articles of consumption and additional means of production. But the old constant capital, which was handed over from last year (outside of the portion that was injured and to that extent destroyed, in short, the old constant capital that does not have to be reproduced, and so far as there is any break in the process of reproduction, the insurance covers that), so far as its value is concerned, is not reproduced by the newly added labor.

We see, furthermore, that a portion of the newly added

labor is continually absorbed in the reproduction and replacement of consumed constant capital, although this newly added labor resolves itself altogether in revenues, in wages, profit and rent. But it is always overlooked, 1) that one portion of the value of this new labor is not a product of this new labor, but previously existing and consumed constant capital; that the portion of the product, in which this part of value presents itself, cannot be converted into revenue, but replaces the means of production of this constant capital in their natural form. 2) It is overlooked that the portion of value, in which this newly added labor is actually represented, is not consumed as revenue in its natural form, but replaces the constant capital in another sphere, where it is moulded into a natural form, in which it may be consumed as revenue, but which in its turn is not wholly a product of newly added labor.

To the extent that reproduction takes place on the same scale, every consumed element of the constant capital must be replaced by a new natural specimen of the same kind, if not in quantity and form, then at least in natural effectiveness. If the productive power of labor remains the same, then this natural replacement implies the reproduction of the same value, which the constant capital had in its old form. But if the productive power of labor is increased, so that the same substantial elements may be reproduced with less labor, then a smaller portion of value of this product can completely replace the constant part in its natural shape. The surplus may then be employed in the formation of additional capital, or a larger portion of the product may be given the form of articles of consumption, or the surplus labor may be reduced. On the other hand, if the productive power of labor decreases, then a larger portion of the product must be used for the replacement of the old capital; the surplus product decreases.

The reconversion of profit, or of any form of surplus-value, into capital shows — without considering the historically defined economic form and looking upon it merely as a simple formation of new means of production — that the

condition still continues, in which the laborer performs surplus labor for the purpose of producing means of production, outside of the labor by which he acquires his means of subsistence. Transformation of profit into capital signifies merely the employment of a portion of the surplus labor in the formation of new, additional, means of production. That this takes place in the shape of a conversion of profit into capital, signifies merely that not the laborer, but the capitalist has control of the surplus labor. That this surplus labor must first pass through a stage, in which it appears as revenue (whereas in the case of a savage it appears as surplus labor aiming directly at the manufacture of means of production), means simply that this labor, or its product, is appropriated by the non-laborer. But what is actually converted into capital, is not the profit as such. Transformation of surplus-value into capital signifies merely that the surplus-value and the surplus-product are not consumed individually as revenue of the capitalist. What is actually so converted is the value, the materialized labor, that is, the product in which this value directly presents itself, or for which it is exchanged after having been converted into money. Even when the profit is reconverted into capital, it is not this definite form of surplus-value, not the profit, which is the source of the new capital. The surplus-value is merely changed from one form into another. But it is not this change of form which gives it the character of capital. It is the commodity and its value, which now perform the function of capital. But that the value of the commodity is not paid for — and only by this means does it become surplus value — is quite immaterial for the materialization of labor, for value itself.

The misunderstanding expresses itself in various forms. For instance, it is said that the commodities, of which the constant capital consists, also contain elements of wages, profit and rent. Or, that the thing, which is revenue for the one, is capital for some one else, and that these are but subjective relations. Thus the yarn of the spinner contains a portion of value representing profit for him. If the weaver

buys the yarn, he realizes the profit of the spinner, but for himself this yarn is merely a part of his constant capital.

Aside from the remarks made on this score concerning the relations between revenue and capital, we add the following observations: The value which passes with the yarn as a constituting element into the capital of the weaver, is the value of the yarn. In what manner the parts of this value have resolved themselves for the spinner into capital and revenue, or, in other words, into paid and unpaid labor, is immaterial for the determination of the value of the commodity itself (aside from modifications by the average profit). Back of this lurks the idea that the profit, or the surplus-value in general, is a surplus above the value of the commodity, which can be made only by raising the price, by mutual cheating, by making a gain through sale. When the price of production is paid, or the value of the commodity, this pays, naturally, also for those portions of the value of commodities, which present themselves to the seller in the shape of revenue. Of course, we are not speaking of monopoly prices here.

In the second place, it is quite correct to say that the component parts of a commodity which make up the constant capital, like any other value of commodities, may be reduced to parts of value, which resolve themselves for the producers and the owners of the means of production into wages, profit and rent. This is merely a capitalist form of expression for the fact that all value of commodities is but the measure of the socially necessary labor contained in the commodities. But we have already shown in Volume I, that this does not prevent a separation of the produced commodities of any capital into separate parts, of which the one represents exclusively the constant portion of capital, another the variable portion of capital, and a third one only surplus-value.

Storch expresses the opinion of many others, when he says: "The salable products, which make up the national revenue, must be considered in political economy in two ways. They must be considered in their relations to indi-

viduals as values and in their relations to the nation as goods. For the revenue of a nation is not appreciated like that of an individual, by its value, but by its utility or by the wants which it can satisfy." (*Considérations sur le revenu national*, p. 19.)

In the first place, it is a false abstraction to regard a nation, whose mode of production is based upon value and otherwise capitalistically organized, as an aggregate body working merely for the satisfaction of the national wants.

In the second place, after the abolition of the capitalist mode of production, but with social production still in vogue, the determination of value continues to prevail in such a way that the regulation of the labor time and the distribution of the social labor among the various groups of production, also the keeping of accounts in connection with this, become more essential than ever

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CHAPTER L.

THE SEMBLANCE OF COMPETITION.

We have shown, that the value of commodities, or the price of production regulated by their total value, resolves itself into:

1) One portion of value replacing constant capital, or representing past labor, used up in the form of means of production in the making of the commodity. This, in brief, is the value, or price, which these means of production carried into the process of production of the commodities. We never speak of individual commodities in this case, but of commodity-capital, that is, of that form, in which the product of capital during a certain period of time, say of one year, presents itself, and of which the individual commodity forms one element, which, moreover, so far as its value is concerned, resolves itself into the same analogous constituents.

2) One portion of value representing variable capital,

which measures the income of the laborer and converts itself into wages for him. The laborer has produced these wages in this variable portion of value. This, briefly, is that portion of value, which represents the paid portion of the new labor added to the above constant portion in the production of commodities.

3) Surplus-Value, which is that portion of the value of the produced commodities, in which the unpaid, or surplus labor is incorporated. This last portion of the value in its turn assumes the independent forms, which are at the same time forms of revenue, namely the forms of profit on capital (interest on capital as such and profit of enterprise on capital in productive work) and ground-rent, which is claimed by the owner of the land participating in the process of production. The parts mentioned under 2) and 3), that is, that portion of value, which always assumes the revenue forms of wages (but only after having first gone through the form of variable capital), profit and rent, is distinguished from the constant portion mentioned under 1) by the fact that in it that entire portion of value is dissolved, in which the additional labor added to that constant part, to the means of production of the commodities, is materialized. Now, if we leave aside the constant portion, then it is correct to say that the value of a commodity, to the extent that it represents newly added labor, continually resolves itself into three parts, which form three forms of revenue, namely wages, profit and rent,[150] in which the respective

[150] In separating the value added to the constant portion of value into wages, profit and ground rent, it is a matter of course that these are portions of value. One may, indeed conceive them as existing in the direct product created by laborers and capitalists in some particular sphere of production, for instance, yarn produced in a spinnery. But in fact they do not materialize in this product any more or any less than in any other commodity, in any other part of the material wealth having the same value. And in practice wages are paid in money, that is, in the pure form of value; likewise interest and rent. For the capitalist, the transformation of his product into the pure expression of value is indeed very important; in the distribution itself its existence is already assumed. Whether these values are reconverted into the same product, out of whose production they arose, whether the laborer buys back a part of the product directly produced by himself or the product of some other labor of a different kind, has nothing to do with the matter itself. Mr. Rodbertus quite unnecessarily goes into a passion about this.

magnitudes of value, that is the aliquot portions, which they constitute in the total value, are determined by various peculiar laws, which we have analysed previously. But on the other hand, it would be a mistake to say that the value of wages, the rate of profit, and the rate of rent form independent constituent elements of value, whose composition gives rise to the value of commodities, leaving aside the constant part; in other words, it would be a mistake to say that they are constituent elements of the value of commodities, or of the price of production.[151]

The difference is easily seen.

Take it that the value of the product of a capital of 500 is equal to 400 c + 100 v + 150 s = 650; let the 150 s be divided into 75 profit + 75 rent. We will also assume, in order to forestall useless difficulties, that this is a capital of average composition, so that its price of production and its value coincide; this coincidence always takes place, whenever the product of such an individual capital may be considered as the product of some portion of the total capital corresponding to the same magnitude.

Here the wages, measured by the variable capital, form 20% of the advanced capital; the surplus-value, calculated on the total capital, forms 30%, namely 15% profit and 15% rent. The entire portion of value of the commodity representing the newly added labor is equal to 100 v + 150 s = 250. Its magnitude does not depend upon its division into wages, profit and rent. We see by the proportion of these parts to each other that a labor-power, which is paid with 100 in money, say 100 pounds sterling, has supplied a quantity of labor represented by money to the amount of 250 pounds sterling. We see from this that the laborer performed one and a half times as much surplus labor as he did labor for himself. If the working day contained 10 hours, then he worked 4 hours for himself and 6

[151] "It will be sufficient to remark that the same general rule, which regulates the value of raw produce and manufactured commodities, is applicable also to the metals; their value depending not on the rate of profits, nor on the rate of wages, nor on the rent paid for mines, but on the total quantity of labor necessary to obtain the metal and to bring it to market." (Ricardo *Principles,* Chapter III, p. 77.)

hours for the capitalist. Therefore the labor of the laborers paid with 100 pounds sterling is expressed in money to the amount of 250 pounds sterling. Outside of this value of 250 pounds sterling there is nothing to divide between laborer and capitalist, between capitalist and landlord. It is the total value newly added to the value of 400, which is the value of the means of production. The value of 250 thus produced and determined by the quantity of labor materialized by it in the commodities forms the limit of the dividend, which the laborer, the capitalist and the landlord will be able to draw out of this value in the shape of the revenues, wages, profit and rent.

Take it that a capital of the same organic composition, that is, of the same proportion between the employed living labor-power and the constant capital set in motion by it, should be compelled to pay 150 pounds sterling instead of 100 pounds sterling for the same labor-power which sets in motion the constant capital of 400. And let us further assume that profit and rent should share the surplus-value in a different proportion. As we have assumed that the variable capital of 150 pounds sterling sets the same quantity of labor in motion as the variable capital of 100 did, the newly added value would be 250 as before, and the total value of the product would be 650, also as before. But the formula would then read: 400 c + 150 v + 100 s, and these 100 s would be divided, say, into 45 profit and 55 rent. The proportion, in which the newly produced total value would now be divided among wages, profit and rent, would now be very different. The magnitude of the advanced total capital would also be very different, although it would set only the same total quantity of labor in motion. The wages would amount to $27\frac{3}{11}\%$, the profit to $8\frac{2}{11}\%$, and the rent to 10% of the advanced capital. The total surplus-value would, therefore, amount to a little over 18%.

In consequence of the raise in wages the unpaid portion of the total labor would be changed and with it the surplus-value. If the working day contained 10 hours, the laborer would work 6 hours for himself and 4 hours for the capital-

ist. The proportion of profit and rent would also be changed, the reduced surplus-value would be divided in a different proportion between the capitalist and the landlord. Finally, since the value of the constant capital would have remained the same, while the value of the advanced variable capital would have risen, the reduced surplus-value would express itself in a still more reduced rate of gross profit, by which we mean here the proportion between the total surplus-value and the advanced total capital.

The change in the value of wages, in the rate of profit, and in the rate of rent, whatever might be the effect of the laws regulating the proportion of these parts, could move only within the limits set by the newly produced value of commodities amounting to 250. An exception could take place only, if rent should rest upon a monopoly price. This would not alter the law itself, but merely complicate its analysis. For if we consider only the product itself in this case, then merely the division of the surplus-value would be different. But if we consider its relative value as compared to other commodities, then we should find no other difference but that a portion of the surplus-value had been transferred from them to this particular commodity.

Let us sum up:

Value of Product	New Value	Rate of Surplus-Value	Rate of Gross Profit
First Case: 400 c + 100 v + 150 s = 650	250	150 %	30 %
Second Case: 400 c + 150 v + 100 s = 650	250	$66\frac{2}{3}$%	$18\frac{2}{11}$%

In the first place, the surplus-value falls by one-third from its former figure, it falls from 150 to 100. The rate of profit falls by a little more than one-third, from 30% to 18%, because the reduced surplus-value must be calculated on an increased advance of total capital. But it does not fall in the same proportion as the rate of surplus-value. This last falls from $\frac{150}{100}$ to $\frac{100}{150}$, that is, from 150% to $66\frac{2}{3}$%, whereas the rate of profit falls only from $\frac{150}{500}$ to $\frac{100}{550}$ or from 30% to $18\frac{2}{11}$%. The rate of profit, then, falls proportionately more than the mass of surplus-value, but less than the rate of surplus-value. We find, furthermore, that the values as well as the masses of products remain the same, so long as the same quantity of

labor is employed, although the advanced capital has increased by the augmentation of its variable portion. This increase of the advanced capital would indeed make itself felt for a capitalist who would start out in business. But looking upon reproduction as a whole, the augmentation of the variable capital means merely that a larger portion of the new value added by newly performed labor is converted into wages, and thus at first into variable capital instead of into surplus-value and surplus products. The value of the product thus remains the same, because it is bounded on the one hand by the value of the constant capital, 400, and on the other hand by the figure 250, in which the newly added labor is represented. Both of these values remain unaltered. The product would represent the same amount of use-value in the same quantity of exchange-value, to the extent that it would return into the constant capital, so that the same mass of elements of constant capital would retain the same value. The matter would be different, if the wages should rise, not because the laborer would receive a larger share of his own labor, but if he should receive a larger portion of his own labor, because the productivity of labor would have decreased. In this case, the total value, in which this same labor, paid and unpaid, would be incorporated, would remain the same. But the mass of products, in which this quantity of labor would be incorporated, would be less, so that the price of each aliquot portion of this product would rise, because each portion would contain more labor. The increased wages of 150 would not represent any more labor than the wages of 100 did before; the reduced surplus-value of 100 would represent merely two-thirds of the product which it did previously, only $66\frac{2}{3}\%$ of the mass of use-values, which were formerly represented by 100. In this case the constant capital would also become dearer to the extent that this product would go back into it. But this would not be the result of the increase in wages. This increase in wages would rather be a result of the increase in the price of commodities and a result of the diminished productivity of the same quantity of labor. Here the impression is given that the raise in wages made the product

dearer; however, this raise is not the cause, but rather a result of a change in the value of the commodities, due to the decreased productivity of labor.

On the other hand, so long as all other circumstances remain the same, so long as the same quantity of employed labor is represented by 250, and the value of the means of production handled by it should then rise or fall, then the value of the same quantity of products would rise or fall by the same magnitude. 450 c + 100 v + 150 s make the value of the product equal to 700. But 350 c + 100 v + 150 s would make the value of the same quantity of products only equal to 600, as against a former 650. Hence, if the advanced capital should increase or decrease, while it sets the same quantity of labor in motion, the value of its product would rise or fall, other circumstances remaining the same, if the increase or decrease of the advanced capital is due to a change in the value of the constant portion of capital. On the other hand, the value of the product remains unchanged, if the increase or decrease of the advanced capital is caused by a change in the value of the variable portion of capital, provided that the productivity of labor remains the same. In the case of the constant capital, the increase or decrease of its value is not balanced by any opposite movement. But in the case of the variable capital, so long as the productivity of labor remains the same, an increase or decrease of its value is balanced by the opposite movement on the part of the surplus-value, so that the value of the variable capital plus the surplus-value, that is, the new value added by new labor to the means of production and newly incorporated in the product, remains the same.

But if the increase or decrease of the value of the variable capital is due to a rise or fall in the price of commodities, that is, to an increase or decrease of the productivity of the labor employed by this investment of capital, then the value of the product is affected. Only, the rise or fall of wages in this case is not a cause, but an effect.

On the other hand, if the constant capital in the above illustration should remain at 400 c, and if the change from

100 v + 150 s to 150 v + 100 s, that is, an increase of the variable capital, should be due to a decrease in the productivity of labor, not in this same particular line of industry, say in cotton spinning, but perhaps in agriculture, so that it would be a result of a rise in the price of foodstuffs, then the value of the product would remain unchanged. The value of 650 would still be represented by the same quantity of cotton yarn.

The foregoing leads furthermore to the following conclusions: If a decrease in the expenditure of constant capital is due to economies, etc., in such lines of production as supply agriculture with their products, then this, like a direct improvement in the productivity of the employed labor itself, may lead to a reduction of wages, because it would lead to a cheapening of the subsistence of the laborer, and this would imply an increase of the surplus-value; so that the rate of profit in this case would grow for two reasons, namely on the one hand, because the value of the constant capital would decrease, and on the other hand, because the surplus-value would increase. In our analysis of the conversion of surplus-value into profit we assumed that the wages would not fall, but remain constant, because there we had to investigate the fluctuations of the rate of profit, independent of the changes in the rate of surplus-value. Moreover, the laws which we developed in that case are general ones, and apply also to investments of capital, the products of which do not pass over into the consumption of the laborer, and in that case changes in the value of the product are without influence upon the wages.

We know, then, that the separation and distribution of the new value added by new labor annually to the means of production, or to the constant part of capital, among the various forms of revenue, namely wages, profit and rent, do not alter the limits of this value itself, do not alter the sum of value to be so distributed; neither can a change in the proportions of these different parts alter their sum, which

makes up this given magnitude of value. A given figure of 100 always remains the same, whether it is divided into 50 + 50, or into 20 + 70 + 10, or into 40 + 30 + 30. That portion of the value of the product, which is divided into these revenues, is determined, like the constant portion of the value of capital, by the value of commodities, that is, by the quantity of the labor incorporated in them from case to case. In the first place, then, the quantity of value of the commodities to be distributed among wages, profit and rent is given; in other words, the absolute limit of the sum of the portions of value of these commodities. In the second place, as concerns the individual categories themselves, their average and regulating limits are likewise given. The wages form the basis in this limitation. The wages are regulated on the one side by a natural law; their minimum is determined by the physical minimum required by the laborer for the conservation of his labor-power and for its reproduction; this means a minimum quantity of commodities. The value of these commodities is determined by the labor time required for their reproduction; it is determined by that portion of the new labor added to the means of production, or by that portion of each working day, which the laborer must have for the production and reproduction of an equivalent for the value of these necessary means of subsistence. For instance, if his average daily food requirements have the value of six hours of average labor, then he must work on an average six hours per day for himself. The actual value of his labor-power differs from this physical minimum; it differs according to climate and condition of social development; it depends not merely upon the physical, but also upon the historically developed social needs, which become second nature. But in every country and at any given period this regulating average wage is a given magnitude. The value of all other revenues thus has its limit. It is always equal to the value, in which the total working day (which coincides in the present case with the average working day, since it comprises the total quantity of labor set in motion by the total social capital) is incorporated, minus that portion of this working day,

which is incorporated in wages. Its limit is therefore determined by the limit of that value, in which the unpaid labor is expressed, that is, by the quantity of this unpaid labor. While that portion of the working day, which is required by the laborer for the reproduction of the value of his wages, finds its ultimate limit in the physical minimum of wages, the other portion of the working day, in which surplus labor is incorporated, and with it that portion of value which stands for surplus-value, finds its limit in the physical maximum of the working day, that is, in the total quantity of daily labor time, during which the laborer can be active altogether and still preserve and reproduce his labor-power. As we are here concerned in the distribution of that value, which represents the total labor newly added per year, the working day may here be regarded as a constant magnitude, and is taken for granted as such, no matter how much or how little it may differ from its physical maximum. The absolute limit of that portion of value, which forms surplus-value, and which resolves itself into profit and ground-rent, is thus given. It is determined by the excess of the unpaid portion of the working day over its paid portion, which means by that portion of the value of the total product, in which this surplus labor is realized. If we call the surplus-value thus limited and calculated on the advanced total capital the profit, as I have done, then this profit, so far as its absolute magnitude is concerned, is equal to the surplus-value and, therefore, determined in its boundaries by the same laws as it. On the other hand, the level of the rate of profit is likewise a magnitude inclosed within certain limits by the value of commodities. This rate is the proportion of the total surplus-value to the total social capital advanced in production. If this capital is equal to 500 (say millions) and the surplus-value equal to 100, then 20% form the absolute limit of the rate of profit. The distribution of the social profit at this rate among the various capitals invested in the different spheres of production creates prices of production, which swerve from the values of commodities, and these prices of production are the real regulating average market

prices. But this deviation of prices of production from values abolishes neither the determination of prices by values nor the lawful limits of profit. Instead of the value of a commodity being equal to the capital consumed in it plus the surplus-value contained in it, its price of production is then equal to the capital, k, consumed in it plus the surplus-value falling to its share as a result of the average rate of profit, for instance 20% of the capital advanced in its production, counting both the consumed and the merely employed capital. But this addition of 20% is itself determined by the surplus-value created by the total social capital, and by its proportion to the value of this capital; and for this reason it is 20% and not 10% or 100%. The transformation of the values into prices of production, then, does not abolish the limits of profit, but merely alters its distribution among the various particular capitals, which make up the total social capital, distributes it uniformly among them in the proportion in which they form parts of the value of this total capital. The market prices fall below or rise above these regulating prices of production, but these fluctuations balance each other. If one studies price lists during a certain long period, and if one subtracts the cases, in which the real value of commodities is altered by a change in the productivity of labor, and likewise the cases, in which the process of production has been previously disturbed by natural or social accidents, one will be surprised, in the first place, by the relatively narrow limits of the fluctuations, and, in the second place, by the regularity of their mutual compensation. The same domination of the regulating averages will be found here, which Quételet pointed out in the case of social phenomena. If the equalization of the values of commodities into prices of production does not meet any obstacles, then the rent resolves itself into differential rent, that is, it is limited to the equalization of the surplus-profits, which would be given to some of the capitalists by the regulating prices of production, but which are then appropriated by the landlords. Here, then, the rent has its definite limit of value in the fluctuations of the individual rates of profit,

which are caused by the regulation of the prices of production through the general rate of profit. If private ownership of land places obstacles in the way of the equalization of the values of commodities into prices of production, and appropriates absolute rent, then this absolute rent is limited by the excess of the value of the products of the soil over their prices of production, that is, by the excess of the surplus-value in them over the rate of profit assigned to the capitals by the average rate of profit. This difference then forms the limit of the rent, which is always but a certain portion of surplus-value produced and existing in the commodities.

Finally, if the equalization of the surplus-value into average profit meets with obstacles in the various spheres of production in the shape of artificial or natural monopolies, particularly of monopoly in land, so that a monopoly price would be possible, which would rise above the price of production and above the value of the commodities affected by such a monopoly, still the limits imposed by the value of commodities would not be abolished thereby. The monopoly price of certain commodities would merely transfer a portion of the profit of the other producers of commodities to the commodities with a monopoly price. A local disturbance in the distribution of the surplus-value among the various spheres of production would take place indirectly, but they would leave the boundaries of the surplus-value itself unaltered. If a commodity with a monopoly price should enter into the necessary consumption of the laborer, it would increase the wages and thereby reduce the surplus-value, if the laborer would receive the value of his labor-power, the same as before. But such a commodity might also depress wages below the value of labor-power, of course only to the extent that wages would be higher than the physical minimum of subsistence. In this case the monopoly price would be paid by a deduction from the real wages (that is, from the quantity of use-values received by the laborer for the same quantity of labor) and from the profit of the other capitalists. The limits, within which the monopoly price would

affect the normal regulation of the prices of commodities, would be accurately fixed and could be closely calculated.

Just as the division of the newly added value of commodities into necessary and surplus labor, wages and surplus-value, and its general division between revenues, finds its given and regulating limits, so the division of the surplus-value itself into profit and ground-rent finds its limit in the laws regulating the equalization of the rate of profit. In the division into interest and profits of enterprise the average profit itself forms the limit for both of them. It furnishes the given magnitude of value, which they may divide among themselves and which is the only one that they can so divide. The definite proportion of this division is here accidental, that is, it is determined exclusively by conditions of competition. Whereas in other cases the balancing of supply and demand implies the cessation of the deviation of market prices from their regulating average prices, that is, the cessation of the influence of competition, it is here the only determinant. But why? Because the same factor in production, the capital, has to divide its share of the surplus-value between two owners of the same factor in production. But the fact that no definite, lawful, limit for the division of the average profit is found, does not do away with its limit as a part of the value of commodities, any more than the fact that two partners in a certain business, being under the influence of different circumstances, divide their profit unequally, affects the limits of this profit in any way.

Hence, although that portion of the value of commodities, in which the value of the new labor added to the means of production is incorporated, is divided into different parts, which assume independent forms as revenues, this is no reason why wages, profit and ground-rent should be considered as constituting elements, whose addition, or sum, would be the source of the regulating price of commodities (natural price, prix nécessaire); it is no reason to think that not the value of commodities, after the subtraction of the constant portion of value, is the original unit separated into these three parts, but rather the price of each one of these three

parts is independently determined, and that the price of commodities is then formed by an addition of these three independent magnitudes. In reality the value of commodities is the magnitude which exists first, and it comprises the sum of the total values of wages, profit and rent, whatever may be their relative magnitudes. In the wrong conception, wages, profit and rent are three independent magnitudes of value, whose total magnitude is supposed to produce the magnitude of the value of a commodity, to limit and to determine it.

In the first place it is evident that, if wages, profit and rent constitute the price of commodities, this would apply as much to the constant portion of the value of commodities as to the other portion, in which variable capital and surplus-value are incorporated. This constant portion may here be left entirely out of consideration, since the value of the commodities of which it is made up would likewise resolve itself into wages, profit and rent. We have already shown that this conception denies the existence of such a constant portion of value.

It is furthermore evident that all meaning of value is here eliminated. Only the conception of price remains, in the sense that a certain amount of money is paid to the owners of labor-power, capital and land. But what is money? Money is not a thing, but a definite form of value, hence it is again conditioned upon value. Let us say, then, that a definite amount of gold or silver is paid for those elements of production, or that they are equalled in our minds to this amount. But gold and silver (and the enlightened economist is proud of this understanding) are themselves commodities, like all others. The price of gold and silver is therefore likewise determined by wages, profit and rent. Hence we cannot determine what wages, profit and rent are, by making them equal to a certain amount of gold or silver, for the value of this gold and silver, by which they are supposed to be estimated as equivalents, is precisely supposed to be determined by them, independently of gold and silver, that is, independently of the value of any commodity, for

this value is supposed to be the product of those three. To say that the value of wages, profit and rent consist in their being equivalent to a certain quantity of gold and silver, would merely be the same as saying that they are equal to a certain quantity of wages, profit and rent.

Take wages first. For it is necessary to make labor the point of departure, even in this view of the matter. How, then, is the regulating price of wages determined, the price around which its market prices oscillate?

Let us reply that it is determined by the demand and supply of labor-power. But what sort of a demand is this? It is a demand made by capital. The demand for labor is therefore at the same time a supply of capital. In order to speak of a supply of capital, we should know above all what capital is. What is capital made of? If we select its simplest forms, it consists of money and commodities. But money is merely a form of commodities. Capital, then, consists of commodities. But the value of commodities, according to our assumption, is first determined by the price of the labor producing them, by wages. The existence of wages is here a prerequisite and is considered as a constituting element of the price of commodities. Now this price is to be determined by the proportion of the supplied labor to capital. The price of the capital itself is equal to the price of the commodities of which it is composed. The demand of capital for labor is equal to the supply of capital. And the supply of capital is equal to the supply of a quantity of commodities of a given price, and this price is regulated in the first place by the price of labor, and the price of labor in its turn is equal to that portion of the price of commodities, which makes up the variable capital, which is transferred to the laborer in exchange for his labor; and the price of the commodities, of which this variable capital is composed, is in its turn primarily determined by the price of labor; for it is determined by the prices of wages, profit and rent. In order to determine wages, we cannot, therefore, assume the previous existence of capital, for the value of the capital is itself determined in part by wages.

Besides, the dragging of competition into this problem does not help any. Competition makes the market prices of labor rise and fall. But suppose that the demand and supply of labor are balanced. What determines wages in that case? Competition. But we have just assumed that competition ceases to act as a determinant, that it abolishes its effects by the equilibrium of its two opposing forces. We are precisely trying to find the natural price of wages, that is, the price of labor not regulated by competition, but which, on the contrary, regulates it.

Nothing remains but to determine the necessary price of labor by the necessary subsistence of the laborer. But these articles of food are commodities, which have a price. The price of labor is therefore determined by the price of the necessary means of existence, and the price of the means of existence, like that of all other commodities, is determined primarily by the price of labor. Therefore the price of labor determined by the price of the means of existence is determined by the price of labor. The price of labor is determined by itself. In other words, we do not know by what the price of labor is determined. Labor in this case has any price at all, because it is considered as a commodity. In order, therefore, to speak of the price of labor, we must know what price itself means. But what price itself is, we do not learn in this way at all.

But let us assume, that the necessary price of labor had been determined in this agreeable manner. Then how is the average profit determined, the profit of every capital in normal conditions, which forms the second element of the price of commodities? The average profit must be determined by an average rate of profit; how is this rate determined? By the competition between the capitalists? But this competition itself is conditioned upon the existence of profit. It presupposes the existence of different rates of profit, and thus of different profits, either in the same, or in different spheres of production. Competition can influence the rate of profit only to the extent that it affects the prices of commodities. Competition can merely make the producers within the same

sphere of production sell their commodities at the same prices, and make them sell their commodities in different spheres of production at prices which will give them the same profit, will give them the same proportional addition to the price of commodities, which has already been partially determined by wages. Hence competition cannot balance anything but inequalities in the rate of profit. In order to balance unequal rates of profit, the profit as an element in the price of commodities must already exist. Competition does not create it. It lowers or raises its level, but it does not create this level, which appears whenever the balance has been struck. And when we speak of a necessary rate of profit, we wish precisely to know the rate of profit which is independent of the movements of competition, and which rather regulates these movements. The average rate of profit appears, when the forces of the competing capitalists balance each other. Competition may bring about this balance, but cannot create the rate of profit which appears whenever this balance is found. As soon as the equilibrium is reached, why is the rate of profit 10, or 20, or 100%? On account of competition? No, on the contrary, competition has done away with the causes, which produced deviations from the rate of 10, or 20, or 100%. It has brought about a price of commodities, by which every capital yields the same profit in proportion to its magnitude. The magnitude of this profit itself is independent of it. It merely reduces all deviations to this magnitude. One man competes with another, and competition compels him to sell his commodities at the same price as the other. But why is this price 10 or 20 or 100%?

Nothing remains under these circumstances but to declare that the rate of profit, and with it the profit itself arises in some unaccountable manner by a certain addition to the price of commodities, which to that extent was determined by the wages. The only thing which competition tells us is that this rate of profit must have a certain figure. But we knew that before, when we spoke of an average rate of profit and of a "necessary price" of profit.

It is quite unnecessary to thrash this absurd process over in the case of ground-rent. It is evident, even so, that it, logically pursued, makes profit and rent appear as additions made by unaccountable laws to the price of commodities, which is primarily determined by wages. In short, competition has to shoulder the duty of explaining all inexplicable ideas of the economists, whereas the economists should rather explain competition.

Now, if we leave aside the illusion of a profit and rent created by the circulation, that is of parts of price arising through sale — for circulation can never give what it did not first receive — the matter simply amounts to this:

Let the price of a commodity determined by wages be 100; let the rate of profit be 10% of the wages, and the rent 15% of the wages. Then the price of the commodity determined by wages, profit and rent is 125. These added 25 cannot come from the sale of this commodity. For all sellers sell to each other at 125 what has actually cost only 100 in wages, and the result is the same as though they had all sold at 100. The operation must rather be studied independently of the process of circulation.

If the three revenues share the commodity itself, which now costs 125 — and it does not alter the matter, if the capitalist should first sell at 125, then pay 100 to the laborer, 10 to himself, and 15 to the landlord — then the laborer receives $\frac{4}{5}$, equal to 100, of the value and of the product. The capitalist receives $\frac{2}{25}$ of the value and of the product, and the landlord $\frac{3}{25}$. When the capitalist sells at 125, instead of at 100, he merely gives to the laborer $\frac{4}{5}$ of the product, in which his labor is incorporated. This would be the same, if he had given 80 to the laborer and kept back 20, of which he would share 8 and the landlord 12. In this case he would have sold the commodity at its value, since in fact the additions to the price of the commodity are made independently of the value of the commodity, which is assumed to be determined here by the value of labor-power. This amounts in a roundabout way to saying that in this conception the term wages, here 100, is equal

to the value of the product, that is, equal to that sum of money, in which the same definite quantity of labor is represented; but that this value again differs from the real wages and therefore leaves a surplus. Only, in the present case, this is obtained nominally by an addition to the price. Hence, if the wages were 110 instead of 100, the profit would have to be 11 and the ground-rent 16½, so that the price of the commodity would be 137½. This would leave the proportion unaltered. But as the division would always be obtained by a nominal addition of definite percentages to the wages, the price would rise and fall with the wages. The wages are here first assumed as equal to the value of the commodity, and then again separated from it. In fact, however, the matter amounts in a roundabout and meaningless way to this, that the value of the commodity is determined by the quantity of labor contained in it, whereas the value of wages is determined by the price of the necessities of life, and the surplus of value above the wages forms profit and rent.

The separation of the value of commodities, after the subtraction of the value of the means of production consumed in their creation, this separation of this given quantity of value determined by the quantity of labor incorporated in the produced commodities into three parts, namely into wages, profit and rent, which assume the shape of independent and mutually unrelated revenues, this same separation appears on the surface of capitalist production, and consequently in the minds of the agents bounded by it, in an inverted form.

Let the total value of a certain commodity be 300, of which 200 may be the value of the means of production, or elements of constant capital, consumed in its production. This leaves 100 as the amount of the new value added to this commodity in its process of production. This new value of 100 is all that is available for division among these three forms of revenue. Let us place the figure for wages at x, for profit at y, for ground-rent at z, then the sum of $x + y + z$ will always be 100 in our present case. In the conception of the industrials, merchants and bankers, as in that of the

vulgar economists, matters are supposed to pass in an entirely different way. According to them it is not the value of the commodity, which equals 100 after subtracting the value of the means of production consumed in it, nor is it this 100 which is divided into x, y and z. According to them it is rather the price of the commodity, which is composed of wages, profit and rent, whose figures of value are determined independently of the value of this commodity and independently of each other, so that x, y and z exist independently, each by itself and is so determined, while the sum of these magnitudes, which may be larger or smaller than 100, makes up the value of the commodity by adding these three different values together. This case of mistaken identity is necessary:

1) Because the component parts of value in the commodities face each other as independent revenues, which are referred back as such to three very dissimilar agencies in production, namely to labor, capital and land, and which then seem to arise out of these. The ownership of labor-power, of capital, of land, is the cause, which assigns these different parts of the value of commodities to these respective owners, and transforms these parts into revenue for them. But the value does not arise from a transformation of its parts into revenue, it must rather exist before it can be converted into revenue, before it can assume this form. The appearance of the reverse must fortify itself so much the more, as the determination of the relative magnitude of these three parts follows different laws, whose connection with and limitation by the value of commodities themselves does not show itself on the surface by any means.

2) We have seen that a general rise or fall of wages, by causing a movement in the opposite direction on the part of the average rate of profit, so long as other circumstances remain the same, changes the prices of production of the different commodities, raises some and lowers others, according to the average composition of the capital in the respective spheres of production. There is no doubt that at least in some spheres of production the experience is made, that the

average price of a commodity rises, because wages have risen, and falls, because wages have fallen. What is not "experienced" is the secret regulation of this change by the value of commodities, which is independent of wages. But if the rise of wages is local, if it takes place only in particular spheres of production in consequence of peculiar circumstances, then a corresponding nominal raise of prices may occur in the case of these commodities. The rise of the relative value of one kind of commodities as against others, which have been produced with an unchanged scale of wages, is then merely a reaction against the local disturbance of a uniform distribution of surplus-value among the various spheres of production, a means of leveling particular rates of profit into an average rate. The "experience," which is met in that case, is once more the determination of the price by the wages. In both these cases, the same experience shows that the wages determine the prices of commodities. What is not "experienced," is the hidden cause of this interrelation. Furthermore: The average price of labor, that is, the value of labor-power, is determined by the price of production of the necessary articles of subsistence. If the price of these falls, so does that of those. What is once more experienced here, is the existence of a connection between wages and the price of commodities. But the cause may seem to be an effect, and the effect a cause, as is also the case in the movements of market prices, where a rise of wages above its average corresponds to the rise of the market prices above the prices of production during periods of prosperity, and subsequent fall of wages below their average corresponds to a fall of market prices below the prices of production. Owing to the dependence of prices of production upon the values of commodities, the primary experience, aside from the oscillating movements of the market prices, should always be that the rate of profit falls whenever wages rise, and vice versa. But we have seen that the rate of profit may be determined by the movements of the value of constant capital, independently of the movements of wages; so that wages and the rate of profit, instead of moving in opposite

directions, move in the same direction, and may rise or fall together. If the rate of surplus-value were directly identical with the rate of profit, then this could not happen. Even if wages should rise as a result of a rise in the prices of foodstuffs, the rate of profit may remain the same, or may even rise, owing to a greater intensity of labor or a prolongation of the working day. All these experiences corroborate the illusion created by the apparently independent and reversed form of the parts of value, as though either the wages alone, or wages and profit together determined the value of commodities. As soon as this seems to be the case with reference to wages, so that the price of labor and the value created by labor seem to coincide, the same applies as a matter of course to profit and rent. Their prices, that is, their expression in money, must then seem to be regulated independently of labor and of the value produced by it.

3) Let us assume that the values of commodities, or the apparently independent prices of production, coincide seemingly directly and continually with the market prices of commodities, instead of merely enforcing themselves as the regulating average prices by the continual balancing of the fluctuations of market prices. Let us assume, furthermore, that reproduction always takes place under the same unaltered conditions, so that the productivity of labor remains constant in all elements of capital. Finally, let us assume that that portion of the value of the produced commodities, which is formed in every sphere of production by the addition of a new quantity of labor, or by the addition of a newly produced value to the value of the means of production, is always divided according to the same unaltered proportion into wages, profit and rent, so that the actually paid wages, the actually realized profit, and the actual rent always directly coincides with the value of labor-power, with that portion of the total surplus-value which falls to the share of every active part of total capital by means of the average rate of profit, and with the limits, in which ground-rent is normally held upon this basis. In one word, let us assume that the division of the produced social values and the regulation of

the prices of production takes place on a capitalist basis, but that competition is abolished.

Under these assumptions, then, under which the value of commodities would be constant and would appear so, under which that part of the value of commodities which resolves itself into revenues would remain a constant magnitude and would always present itself as such, and under which, finally, this given and constant part of value would always be divided according to constant proportions into wages, profit and rent, even under these assumptions would the real movement necessarily appear in an inverted form: not as a division of a previously given quantity of value into three parts, which assume mutually independent forms of revenue, but on the contrary, as the formation of this quantity of value by the sum of the independent and selfdetermined elements of wages, profit and rent, of which it is composed. This illusion would necessarily arise, because in the actual movement of the individual capitals and of the commodities produced by them not the value of the commodities would seem to precede their division, but vice versa, the parts into which it is divided would seem to exist before the value of the commodities. In the first place we have seen that to every capitalist the cost price of his commodities appears as a given magnitude and continually presents itself as such in the actual price of production. But the cost price is equal to the value of the constant capital, the advanced means of production, plus the value of labor-power, which, however, presents itself to the agent in production in the irrational shape of a price of labor, so that the wages appear at the same time as a revenue for the laborer. The average price of labor is a given magnitude, because the value of labor-power, like that of any other commodity, is determined by the labor time required for its reproduction. But as concerns that portion of the value of commodities, which resolves itself into wages, it does not arise from the fact that it assumes this form of wages, nor from the fact that the capitalist advances to the laborer his share of his own product in the shape of wages, but from the fact that the laborer produces an equivalent

for his wages, that is, that a portion of his daily or annual labor produces the value contained in the price of his labor-power. But the wages are stipulated by contract, before the value equivalent to them has been produced. As an element of price, whose magnitude is given before the commodity and its value have been produced, as a constituent part of the cost price, wages do not appear as a part which detaches itself in an independent form from the total value of the commodity, but rather as a given magnitude, which predetermines this value, a creator of price or value. A role similar to that of wages in the cost price of commodities is played by the average profit in their price of production, for the price of production is equal to the cost price plus the average profit on the advanced capital. This average profit figures practically, in the conception and in the calculation of the capitalist himself, as a regulating element, not merely to the extent that it determines the transfer of the capitals from one sphere of investment into another, but also in all sales and contracts, which embrace a process of reproduction extending over long epochs. But whenever it figures in this way, it is a previously existing magnitude, which is in fact independent of the value and surplus-value produced in any particular sphere of production, and still more independent of the value and surplus-value produced by any individual investment of capital in any sphere of production. It does not present itself as a result of a division of value, but rather as a magnitude independent of the value of the produced commodities, as existing from the start and determining the average price of the commodities, that is, as a creator of value. Indeed, the surplus-value, owing to its separation into various and mutually unrelated parts, appears in a still more concrete form as a prerequisite for the creation of the value of commodities. A part of the average profit, in the form of interest, faces the capitalist independently as an element preceding the production of commodities and of their value. Although the fluctuations of the amount of interest are considerable, yet at any specific moment it is a given magnitude for every capitalist, and it enters into the cost price of

the commodities produced by any individual capitalist. So does also the ground-rent in the form of lease money fixed by contract in the case of the agricultural capitalist, and in the form of rent for business rooms in the case of other business men. These parts, into which surplus-value is divided, being given as elements of cost price for the individual capitalist, appear for this reason inversely as creators of surplus-value; they appear as creators of a portion of the price of commodities, just as wages appear as the creator of the other portion. The secret of the continual reappearance of these divided parts of commodity value in the role of prerequisites for the formation of value itself is simply this, that the capitalist mode of production, like any other, does not merely always reproduce the material product, but also the economic conditions, the definite economic forms of its creation. Its result, therefore, appears as continually as its prerequisites, as its prerequisites appear in the role of its results. And it is this continual reproduction of the same conditions, which the individual capital anticipates in a matter of fact way as an indubitable fact. So long as the capitalist mode of production persists as such, a portion of the newly added labor resolves itself continually into wages, another into profit (interest and profit of enterprise), and a third into rent. In the contracts between the owners of the various agencies of production this is always assumed, and this assumption is correct, no matter how much the relative proportions may fluctuate in individual cases. The definite shape, in which the parts of value face each other, is assumed as pre-existing, because it is continually reproduced, and it is continually reproduced, because it is continually taken for granted.

It is true, that both experience and the appearance of things demonstrate the fact that the market prices, whose influence seems to the capitalist to be indeed the whole thing in the determination of values, are by no means dependent upon these anticipations, so far as their amount is concerned. They are not governed by any contracts demanding a high or a low rent and interest. But the market prices are constant

only in their changes, and their average for a certain long period results in the respective averages of wages, profit and rent as magnitudes dominating the constant ones, such as the market prices, in the last analysis.

On the other hand, it seems like a simple reflection, that if wages, profit and rent are creators of value for the reason that they seem to precede the production of value, and that they are taken for granted by the individual capitalist in his cost price and price of production, then the constant portion of value, whose value enters as a given quantity into the production of every commodity, is also a creator of value. But the constant portion of value is nothing but a quantity of commodities and, therefore, of values of commodities. Thus we should arrive at the absurd tautology that the value of commodities is the creator and cause of the value of commodities.

If the capitalist were interested in reflecting about this — and his reflections as a capitalist are dictated exclusively by his interests and his interested motives — his experience would show him, that the product, which he himself produces, passes over into other spheres of production as a constant part of capital, and that products of these other spheres of production pass over into his own product as constant parts of capital. Owing to the fact that the additional value of his own new production, from his point of view, seems to be formed by means of wages, profit and rent, the same appearance holds good also in the case of the constant portion consisting of products of other capitalists. And so the price of the constant portion of capital, and with it the total value of the commodities, reduces itself in the last resort, although in a somewhat unaccountable manner, to a sum of values resulting from the addition of the independent creators of value, wages, profit and rent, which are regulated by different laws and come from different sources.

4) Whether the commodities are sold, or not sold, at their values, whether their value is determined in one way or another, is quite immaterial for the individual capitalist. This determination of values is from the very outset a process

passing behind his back and controlled by conditions independent of himself, because it is not the values, but the divergent prices of production, which form the regulating average prices in every sphere of production. The determination of values as such, interests and influences the individual capitalist and the capital in each sphere of production only to the extent that the reduced or increased quantity of labor required in accordance with the rise or fall of the productive power of labor, enables him in one case to make an extra profit, and compels him in another to raise the price of his commodities, because an additional amount of wages, an additional amount of constant capital, and consequently some more interest, fall upon each individual part of the product, or upon the individual commodities. This determination of values interests him only to the extent that it raises or lowers the cost of production of commodities for himself, in other words, only to the extent that it places him in an exceptional position.

On the other hand, wages, interest and rent appear to him as regulating boundaries, not only of the price at which he can realize the profit of enterprise, that is, the profit falling to his share in his capacity as a producing capitalist, but also of the price at which he must be able to sell his commodities, if he is to keep his reproduction going at all. It is quite immaterial for him, whether he realises the value and surplus-value in his commodities by their sale, provided only that he gets the customary profit or enterprise or more than that, so long as he pockets this surplus over and above the individual cost price determined for him by wages, interest and rent. Aside from the constant portion of capital, wages, interest and rent appear to him, therefore, as the limiting, creating, determining elements of the price of commodities. For instance, if he can succeed in depressing wages below their normal level, below the value of labor-power, if he can obtain capital at a lower rate of interest, if he can pay less than the normal amount for rent, then he does not care, whether he sells his product below its value, or even below its price of production, so that he gives away without any

equivalent a portion of the surplus-value contained in the commodities. This applies even to the constant portion of capital. For instance, if an industrial capitalist can buy his raw material below its price of production, then this protects him against loss, even if he sells it in his own finished product under its price of production. His profit of enterprise may remain the same, or may even increase, so long as the excess of the price of commodities over its elements remains the same or increases. But aside from the value of the means of production, which enter into his own production with a given price, it is precisely wages, interest and rent which enter into this production as limiting and regulating amounts of price. Consequently they appear to him as elements determining the price of commodities. The profit of enterprise, from his point of view, seems determined either by the excess of the market prices, dependent upon accidental conditions of competition, over the immanent value of commodities determined by those elements of price. Or, to the extent that this profit itself exerts a determining influence upon market prices, it seems itself dependent upon the competition between buyers and sellers.

In the competition, both of the individual capitalists among themselves and in the competition on the world market, it is the given and presupposed magnitudes of wages, interest and rent which enter into the calculation as constant and regulating magnitudes. They are constant, not in the sense of being unalterable magnitudes, but in the sense that they are given in any individual case and that they form the constant boundary for the continually fluctuating market prices. For instance, in the competition on the world market the question is exclusively as to whether the commodities can be sold at, or below, the existing world market prices with a profit, as to whether, with the existing wages, interest and rent a corresponding profit of enterprise can be realized. If the wages and the price of land are low in a certain country, while the interest on capital is high, because the capitalist mode of production has not been developed in it, whereas in some other country the wage and the price of

land are nominally high, while the interest on capital is low, then the capitalist employs in the one country more labor and land, in the other relatively more capital. These factors enter as determining elements into the calculation by which the degree of possible competition between these two countries is estimated. Here, then, experience shows theoretically, and the interested calculation of the capitalist shows practically, that the prices of commodities are determined by wages, interest and rent, by the price of labor, of capital and of land, and that these elements of price are indeed the regulating factors of price.

Of course, this always leaves an element which is not assumed as pre-existing, but which rather results from the market price of commodities, namely the surplus above the cost price formed by the addition of these elements, namely of wages, interest and rent. This fourth element seems to be determined in every individual case by competition, and in the long average of cases by the average profit, which in its turn is regulated by this same competition, only at longer intervals.

5) On the basis of capitalist competition it becomes so much a matter of course to separate the value, in which the newly added labor is represented, into the forms of revenue known as wages, profit and ground-rent, that this method is applied (not to mention past stages of history, of which we gave illustrations under the head of ground-rent) even in cases, in which the conditions required for those forms of revenue are missing. In other words, everything is counted under these heads by analogy.

If an independent laborer — for instance, a small farmer, in whose case all three forms of revenue may be used — works for himself and sells his own product, he is, in the first place, considered as his own employer (capitalist), who employs himself as a laborer, and as his own landlord, who employs himself as his own tenant. To himself as a wage worker he pays his wages, to himself as a capitalist he turns over his profit, and to himself as a landlord he pays his rent. Assuming the capitalist mode of production and the condi-

tions corresponding to it to be the general basis of society, this conception is correct, in so far as he does not owe it to his labor, but to his ownership of means of production — which have here assumed the general form of capital — that he is able to appropriate his own surplus labor. And furthermore, to the extent that he creates his own product in the shape of commodities, and thus depends upon its price (and even if he does not depend upon it, this price can be estimated), the quantity of surplus labor, which he can realize, does not depend upon its own size, but upon the general rate of profit; and in like manner any surplus above the amount of surplus-value allowed by the general rate of profit is not determined by the quantity of labor performed by himself, but can be appropriated by him only because he is the owner of the land. Because a form of production not corresponding to the capitalist mode of production may thus be brought in line with its forms of revenue — and to a certain extent not incorrectly — the illusion is strengthened so much the more that the capitalist conditions are the natural conditions of any mode of production.

On the other hand, if we reduce the wages to their general basis, namely to that portion of the product of the producer's own labor which passes over into the individual consumption of the laborer; if we relieve this portion of its capitalist limitations and extend it to that volume of consumption, which is permitted, on the one hand, by the existing productivity of society (that is the social productivity of his own individual labor in its capacity as a truly social one), and on the other hand, required by the full development of his individuality; if we reduce the surplus labor and the surplus product to that measure, which is required under the existing conditions of social production, on the one hand for the formation of an insurance and reserve fund, and on the other hand for the continuous expansion of reproduction to an extent dictated by social needs; finally, if we include in number one, necessary labor, and number two, surplus labor, that quantity of labor, which must always be performed by the ablebodied for the incapacitated or immature members of

society, in other words, if we deprive both wages and surplus-value, both necessary and surplus labor, of their specifically capitalist character, then we have not these forms, but merely their foundations, which are common to all social modes of production.

Moreover, this manner of generalizing was also used in previous modes of production, for instance, in the feudal one. Conditions of production, which did not correspond to it at all, which stood entirely outside of it, were counted in as feudal relations. This was done, for instance, in England, in the case of tenures in common socage (as distinguished from tenures on knight's service), which comprised merely monetary obligations and were feudal in name only.

CHAPTER LI.

CONDITIONS OF DISTRIBUTION AND PRODUCTION.

The new value added by the annual new labor — and thus also that portion of the annual product, in which this value is represented and may be drawn out of the total fund and separated from it — is divided into three parts, which assume three different forms of revenue. These forms indicate that one portion of this value belongs, or goes to, the owner of labor-power, another portion to the owner of capital, and a third portion to the owner of land. These, then are forms, or conditions, of distribution, for they express conditions, under which the newly produced total value is distributed among the owners of the different agencies of production.

To the ordinary mind these conditions of distribution appear as natural conditions, as conditions arising from the nature of all social production, from the laws of human production in general. While it cannot be denied that precapitalist societies show other modes of distribution, yet those modes are interpreted as undeveloped, imperfect, disguised,

differently colored modes of these natural conditions of distribution, which have not reached their purest expression and their highest form.

The only correct thing in this conception is this: Assuming some form of social production to exist (for instance, that of the primitive Indian communes, or that of the more artificially developed communism of the Peruvians), a distinction can always be made between that portion of labor, which supplies products directly for the individual consumption of the producers and their families — aside from the part which is productively consumed — and that portion of labor, which produces surplus products, which always serve for the satisfaction of social needs, no matter what may be the mode of distribution of this surplus product, and whoever may perform the function of a representative of these social needs. The identity of the various modes of distribution amounts merely to this, that they are identical, if we leave out of consideration their differences and specific forms and keep in mind only their common features as distinguished from their differences.

A more advanced, more critical mind, however, admits the historically developed character of the condition of distribution,[152] but clings on the other hand so much more tenaciously to the unaltering character of the conditions of production arising from human nature and thus independent of all historical development.

On the other hand, the scientific analysis of the capitalist mode of production demonstrates that it is a peculiar mode of production, specifically defined by historical development; that it, like any other definite mode of production, is conditioned upon a certain stage of social productivity and upon the historically developed form of the forces of production. This historical prerequisite is itself the historical result and product of a preceding process, from which the new mode of production takes its departure as from its given foundation. The conditions of production corresponding to this specific, historically determined, mode of production have a specific,

[152] J. Stuart Mill: *Some Unsettled Questions in Political Economy*, London, 1884.

historical, passing character, and men enter into them as into their process of social life, the process by which they create their social life. The conditions of distribution are essentially identical with these conditions of production, being their reverse side, so that both conditions share the same historical and passing character.

In the study of conditions of distribution, the start is made from the alleged fact, that the annual product is distributed among wages, profit and rent. But if so expressed, it is a misstatement. The product is assigned on one side to capital, on the other to revenues. One of these revenues, wages, never assumes the form of a revenue, a revenue of the laborer, until it has first faced this laborer in the form of capital. The meeting of the produced requirement of labor and of the general products of labor as capital, in opposition to the direct producers, includes from the outset a definite social character of the material requirements of labor as compared to the laborers, and with it a definite relation, into which they enter in production itself with the owners of the means of production and among themselves. The transformation of these means of production into capital implies on their part the expropriation of the direct producers from the soil, and thus a definite form of property in land.

If one portion of the product were not transformed into capital, the other would not assume the form of wages, profit and rent.

On the other hand, just as the capitalist mode of production is conditioned upon this definite social form of the conditions of production, so it reproduces them continually. It produces not merely the material products, but reproduces continually the conditions of production, in which the others are produced, and with them the corresponding conditions of distribution.

It may indeed be said that capital (and the ownership of land implied by it) is itself conditioned upon a certain mode of distribution, namely the expropriation of the laborers from the means of production, the concentration of these conditions in the hands of a minority of individuals, the exclusive

ownership of land by other individuals, in short, all those conditions, which have been described in the Part dealing with Primitive Accumulation (Volume I. Chapter XXVI). But this distribution differs considerably from the meaning of "conditions of distribution," provided we invest them with a historical character in opposition to conditions of production. By the first kind of distribution is meant the various titles to that portion of the product, which goes into individual consumption. By conditions of distribution, on the other hand, we mean the foundations of specific social functions performed within the conditions of production themselves by special agents in opposition to the direct producers. They imbue the conditions of production themselves and their representatives with a specific social quality. They determine the entire character and the entire movement of production.

Capitalist production is marked from the outset by two peculiar traits.

1) It produces its products as commodities. The fact that it produces commodities does not distinguish it from other modes of production. Its peculiar mark is that the prevailing and determining character of its products is that of being commodities. This implies, in the first place, that the laborer himself acts in the role of a seller of commodities, as a free wage worker, so that wage labor is the typical character of labor. In view of the foregoing analyses it is not necessary to demonstrate again, that the relation between wage labor and capital determines the entire character of the mode of production. The principal agents of this mode of production itself, the capitalist and the wage worker, are to that extent merely personifications of capital and wage labor. They are definite social characters, assigned to individuals by the process of social production. They are products of these definite social conditions of production.

The character, first of the product as a commodity, secondly of the commodity as a product of capital, implies all conditions of circulation, that is, a definite social process through which the products must pass and in which they as-

sume definite social forms. It also implies definite relations of the agents in production, by which the formation of value in the product and its reconversion, either into means of subsistence or into means of production, is determined. But aside from this, the two above-named characters of the product as commodities, and of commodities as products of capital, dominate the entire determination of value and the regulation of the whole production by value. In this specific form of value, labor appears on the one hand only as social labor; on the other hand, the distribution of this social labor and the mutual supplementing and circulation of matter in the products, the subordination under the social activity and the entrance into it, are left to the accidental and mutually nullifying initiative of the individual capitalists. Since these meet one another only as owners of commodities, and every one seeks to sell his commodity as dearly as possible (being apparently guided in the regulation of his production by his own arbitrary will), the internal law enforces itself merely by means of their competition, by their mutual pressure upon each other, by means of which the various deviations are balanced. Only as an internal law, and from the point of view of the individual agents as a blind law, does the law of value exert its influence here and maintain the social equilibrium of production in the turmoil of its accidental fluctuations.

Furthermore, the existence of commodities, and still more of commodities as products of capital, implies the externalization of the conditions of social production and the personification of the material foundations of production, which characterize the entire capitalist mode of production.

2) The other specific mark of the capitalist mode of production is the production of surplus-value as the direct aim and determining incentive of production. Capital produces essentially capital, and does so only to the extent that it produces surplus-value. We have seen in our discussion of relative surplus-value, and in the discussion of the transformation of surplus-value into profit, that a mode of production peculiar to the capitalist period is founded upon this. This

is a special form in the development of the productive powers of labor, in such a way that these powers appear as self-dependent powers of capital lording it over labor and standing in direct opposition to the laborer's own development. Production which has for its incentive value and surplus-value implies, as we have shown in the course of our analyses, the perpetually effective tendency to reduce the labor necessary for the production of a commodity, in other words, to reduce its value, below the prevailing social average. The effort to reduce the cost price to its minimum becomes the strongest lever for the raising of the social productivity of labor, which, however, appears under these conditions as a continual increase of the productive power of capital.

The authority assumed by the capitalist by his personification of capital in the direct process of production, the social function performed by him in his capacity as a manager and ruler of production, is essentially different from the authority exercised upon the basis of production by means of slaves, serfs, etc.

Upon the basis of capitalist production, the social character of their production impresses itself upon the mass of direct producers as a strictly regulating authority and as a social mechanism of the labor process graduated into a complete hierarchy. This authority is vested in its bearers only as a personification of the requirements of labor standing above the laborer. It is not vested in them in their capacity as political or theoretical rulers, in the way that it used to be under former modes of production. Among the bearers of this authority, on the other hand, the capitalists themselves, complete anarchy reigns, since they face each other only as owners of commodities, while the social interrelations of production manifest themselves to these capitalists only as an overwhelming natural law, which curbs their individual license.

It is only because labor is presumed as wage labor, and the means of production in the form of capital, only on account of this specific social form of these two essential agencies in production, that a part of the value (product) presents itself

as surplus-value and this surplus-value as profit (rent), as a gain of the capitalists, as additional available wealth belonging to the capitalist. But only because they present themselves as his profit, do the additional means of production, which are intended for the expansion of reproduction, and which form a part of this profit, present themselves as new additional capital, and only for this reason does the expansion of the process of reproduction present itself as a process of capitalist accumulation.

Although the form of labor, as wage labor, determines the shape of the entire process and the specific mode of production itself, it is not wage labor which determines value. In the determination of value the question turns around social labor time in general, about that quantity of labor, which society in general has at its disposal, and the relative absorption of which by the various products determines, as it were, their respective social weights. The definite form, in which the social labor time enforces itself in the determination of the value of commodities, is indeed connected with the wage form of labor and with the corresponding form of the means of production as capital, inasmuch as the production of commodities becomes the general form of production only upon this basis.

Now let us consider the so-called conditions of distribution themselves. Wages are conditioned upon wage labor, profit upon capital. These definite forms of distribution have for their prerequisites definite social characters on the part of the conditions of production, and definite social relations of the agents in production. The definite condition of distribution, therefore, is merely the expression of the historically determined condition of production.

And now let us take profit. This definite form of surplus-value is a prerequisite for the new creation of means of production by means of capitalist production. It is a relation which dominates reproduction, although it seems to the individual capitalist as though he could consume his entire profit as his revenue. But he meets barriers which hamper him even in the form of insurance and reserve funds, laws of com-

petition, etc. These demonstrate to him by practice that profit is not a mere category in the distribution of the product for individual consumption. Furthermore, the entire process of capitalist production is regulated by the prices of products. But the regulating prices of production are in their turn regulated by the equalization of the rate of profit and by the distribution of capital among the various social spheres of production in correspondence with this equalization. Profit, then, appears here as the main factor, not of the distribution of products, but of their production itself, as a part in the distribution of capitals and of labor among the various spheres of production. The division of profit into profit of enterprise and interest appears as the distribution of the same revenue. But it arises primarily from the development of capital in its capacity as a self-expanding value, creating surplus-value, it arises from this definite social form of the prevailing process of production. It develops credit and credit institutions out of itself, and with them the shape of production. In interest, etc., the alleged forms of distribution enter as determining elements of production into the price.

Ground-rent might seem to be a mere form of distribution, because private land as such does not perform any, or at least no normal, function in the process of production itself. But the fact that, first, rent is limited to the excess above the average profit, and, secondly, that the landlord is depressed by the ruler and manager of the process of production and of the entire social life's process to the position of a mere holder of land for rent, a usurer in land and collector of rent, is a specific historical result of the capitalist mode of production. The fact that the earth received the form of private property is a historical requirement for this mode of production. The fact that private ownership of land assumes forms, which permit the capitalist mode of production in agriculture, is a product of the specific character of this mode of production. The income of the landlord may be called rent, even under other forms of society. But it differs essentially from the rent as it appears under the capitalist mode of production.

The so-called conditions of distribution, then, correspond to

and arise from historically defined and specifically social forms of the process of production and of conditions, into which human beings enter in the process by which they reproduce their lives. The historical character of these conditions of distribution is the same as that of the conditions of production, one side of which they express. Capitalist distribution differs from those forms of distribution, which arise from other modes of production, and every mode of distribution disappears with the peculiar mode of production, from which it arose and to which it belongs.

The conception, which regards only the conditions of distribution historically, but not the conditions of production, is, on the one hand, merely an idea begotten by the incipient, but still handicapped, critique of bourgeois economy. On the other hand it rests upon a misconception, an identification of the process of social production with the simple labor process, such as might be performed by any abnormally situated human being without any social assistance. To the extent that the labor process is a simple process between man and nature, its simple elements remain the same in all social forms of development. But every definite historical form of this process develops more and more its material foundations and social forms. Whenever a certain maturity is reached, one definite social form is discarded and displaced by a higher one. The time for the coming of such a crisis is announced by the depth and breadth of the contradictions and antagonisms, which separate the conditions of distribution, and with them the definite historical form of the corresponding conditions of production, from the productive forces, the productivity, and development of their agencies. A conflict then arises between the material development of production and its social form.[153]

[153] See the work on *Competition and Co-operation* (1832?).

CHAPTER LII.

THE CLASSES.

The owners of mere labor-power, the owners of capital, and the landlords, whose respective sources of income are wages, profit and ground-rent, in other words, wage laborers, capitalists and landlords, form the three great classes of modern society resting upon the capitalist mode of production.

In England, modern society is indisputably developed most highly and classically in its economic structure. Nevertheless the stratification of classes does not appear in its pure form, even there. Middle and transition stages obliterate even here all definite boundaries, although much less in the rural districts than in the cities. However, this is immaterial for our analysis. We have seen that the continual tendency and law of development of capitalist production is to separate the means of production more and more from labor, and to concentrate the scattered means of production more and more in large groups, thereby transforming labor into wage labor and the means of production into capital. In keeping with this tendency we have, on the other hand, the independent separation of private land from capital and labor,[154] or the transformation of all property in land into a form of landed property corresponding to the capitalist mode of production.

The first question to be answered is this: What constitutes a class? And this follows naturally from another question, namely: What constitutes wage laborers, capitalists and landlords into three great social classes?

[154] F. List remarks correctly: "Prevalence of self-management in the case of large estates proves only a lack of civilization, of means of communication, of home industries and rich cities. For this reason it is found everywhere in Russia, Poland, Hungary, Mecklenburg. Formerly it prevailed also in England. But with the rise of commerce and industry came their division into medium-sized farms and their occupancy by tenants." (*The Agrarian Constitution, the Petty Farm, and Emigration*, 1842, p. 10.)

At first glance it might seem that the identity of their revenues and their sources of revenue does that. They are three great social groups, whose component elements, the individuals forming them, live on wages, profit and ground-rent, or by the utilization of their labor-power, their capital, and their private land.

However, from this point of view physicians and officials would also form two classes, for they belong to the two distinct social groups, and the revenues of their members flow from the same common source. The same would also be true of the infinite dissipation of interests and positions created by the social division of labor among laborers, capitalists and landlords. For instance, the landlords are divided into owners of vineyards, farms, forests, mines, fisheries.

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END OF VOLUME III.

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